FIJI.

COUNCIL PAPER, No. 27. F. 48/ 4/19. pt. 2.

ANNUAL

MEDICAL AND HEALTH REPORT

FOR THE YEAR

1936.

BY AUTHORITY: H. R. CRAIGIE, ACTING GOVERNMENT PRINTER, SUVA.—1937.

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14*cp*37—583

FIJI ISLANDS

0 5 10 20 30 40 50
STATUTE MILES

INTER-ISLAND SERVICE ROUTES

TO VANCOUVER VIA HONOLULU
TO SAN FRANCISCO VIA SAMOA AND HONOLULU

16° 177° 178° 179° 180° 179° 178°

YASAWA
Yasawa
NATHULA
YANGETA
Viwa
Naviti
ELD
Sinclair
Waya
WAYALAILAI GROUP
Eori
Kandomo
Vomo
(Radio)
Tokoriki
LAUTOKA
Mana Lighthouse
MALOLO
Nandi R.
NANDI
Lighthouse
SINGATOKA
Yanutha
Mbengga
Vatulele
Nananuira
ELLINGTON
PENANG
Vitilevu B.
TAVUA
MBA
Mba R.
NANDARIVATU
Mt VICTORIA
Wainimbuki R.
Wainimala R.
Tholo R.
Wainindawa R.
Nanduloulou R.
Singatoka R.
Wainidina R.
Wainunu R.
Navua R.
NAVUA
SUVA
(Radio)
Kamba Pt.
Naselai L.H.
Naingani
LEVUKA
MOTURIKI
TAILEVU
MBAU
NAUSORI
Ovalau
WAKAYA
Wakaya L.H.
Lighthouse
MBATIKI
Nairai
Ngau
Koro
Lighthouse
KORO
MAKONGAI
Solo L.H.
Ono
VUNISEA
KANDAVU
Mt Washington L.H.
FROM AUCKLAND AND SYDNEY
FULANGA
ONGEALEVU
CONTINUATION OF GROUP SOUTHWARD
Vatoa (Turtle) Id
Vuata Vatoa
Onoilau
Tuvanaira
Tuvanaitholo
Moala
Totoya
Matuku
Undu Pt.
Lighthouse
Ndrua
Kia
MALI
VISONGO
MATHUATA
NANDURI
LAMBASA
(Radio)
Nareketi R.
NANDONGO
YANGANGA
VANUALEVU
Natewa Bay
Kumbulau Pt.
Rambi
Thombia
Yanutha
KIOA
Moutua B.
YANDUA
Mbiva B.
LEKUTU
NASARAVANGGA
VALETHI
(Radio)
Savusavu Bay
SAVUSAVU
WAIYEVO
(Radio)
LAUTHALA
NGAMEA
TAVEUNI
Wainunu Bay
NAMBOUWALU
Namena
Vuna Pt.
SALIALEVU
Nggelelevu
Nukumbasanga
Wailangilala
Lighthouse
NAITAMBA
Bay of Islands
Avea
Vanuambalavu
Thikombiailau
LOMALOMA
Susui
MUNIA
YATHATA
Kaimbu
Vatuvara
KANATHEA
Mango
LAU
Katafanga
TUVUTHA
Yaroua
Thithia
NAYAU
Bacon Id
Vanuamasi
Lakemba
Aiwa
VANUAVATU
GROUP
ONEATA
Olorua
Komo
MOTHE
Karoni
WANGAVA
NAMUKAILAU
Navutuira
Yangasalevu
Navutuiloma
Kambara
Marambo
Fulanga
ONGEALEVU
Ongeandriki

MAGISTERIAL DISTRICTS
1 SUVA
2 NAVUA-SERUA
3 NANDRONGA-THOLO WEST
4 NANDI
5 LAUTOKA
6 MBA
7 RA
8 REWA
9 THOLO EAST
10 THOLO NORTH
11 KANDAVU
12 MAKONGAI
13 LOMAIVITI
14 MBUA
15 MATHUATA
16 SAVUSAVU
17 TAVEUNI
18 LAU

177° 178° 179° 180° 179° 178°
18° 19° 20° 21°

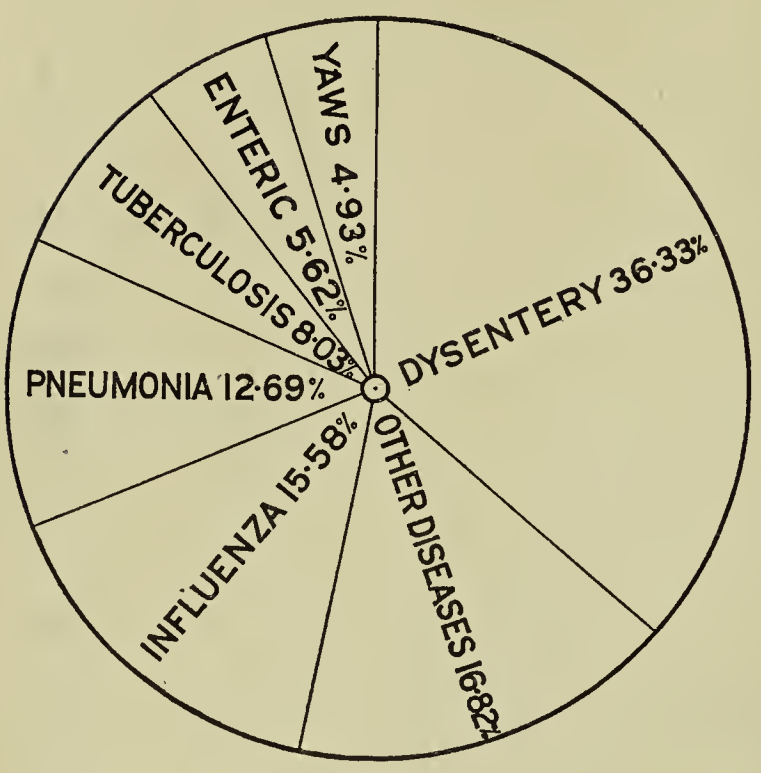
Lands Department, Suva.

CONTENTS.

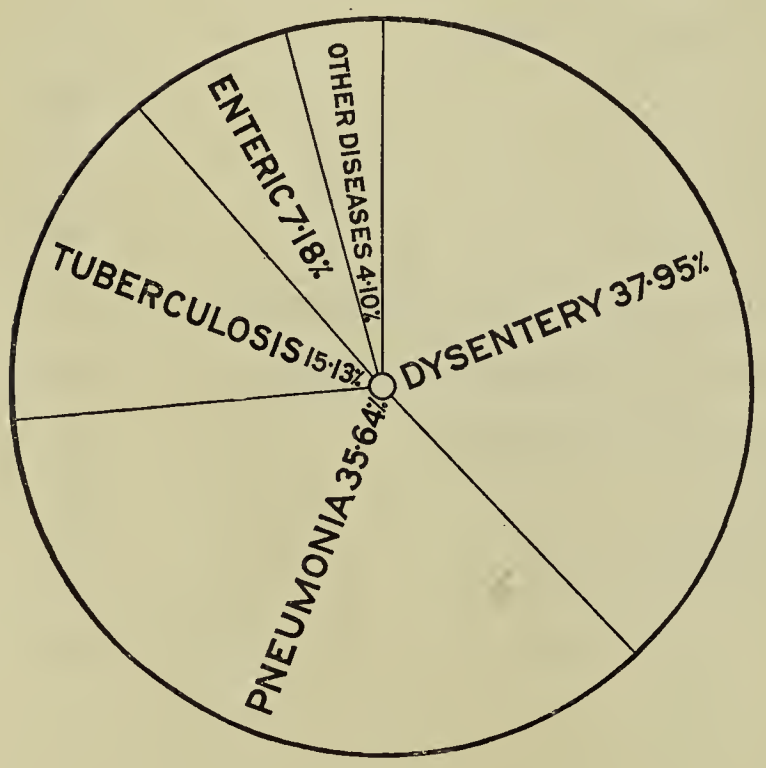
THE DIAGRAMS SHOW THE RELATIVE INCIDENCE OF DIFFERENT DISEASES CAUSING ADMISSION TO, AND DEATHS IN, HOSPITALS OF THE COLONY DURING 1936.

INFECTIVE DISEASES.

TOTAL INCIDENCE, 3,223

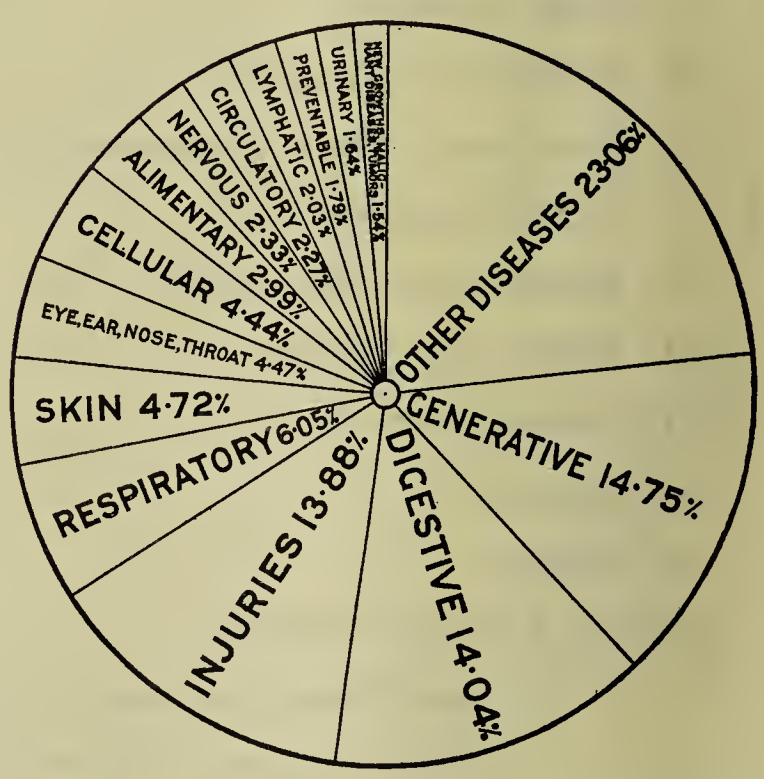


TOTAL DEATHS, 390.

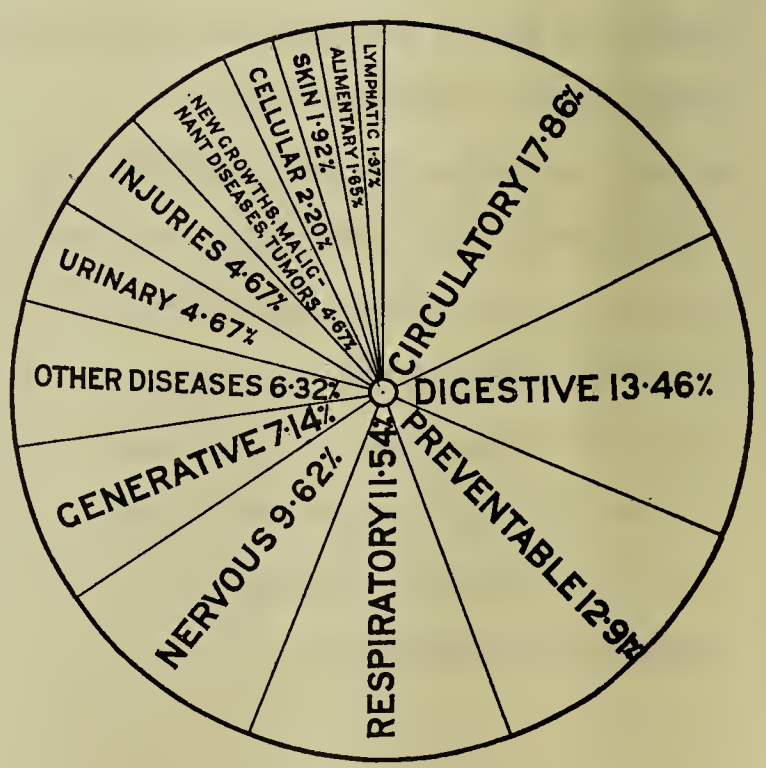


GENERAL SYSTEMIC AND PREVENTABLE DISEASES.

TOTAL CASES, 8,114.



TOTAL DEATHS, 364.



1937.

LEGISLATIVE COUNCIL,

FIJI.

COUNCIL PAPER, No. 27.

Medical Department

(Annual Medical Report for the year ending the 31st December, 1936.)

The Director of Medical Services to The Hon. the Colonial Secretary.

Medical Department,
Suva, 1st June, 1937.

Sir,

I have the honour to submit, for the information of His Excellency the Governor, and for transmission to the Right Honourable the Secretary of State, the Medical Report on the Health and Sanitary conditions prevailing in the Colony of Fiji for the year 1936, together with the returns appended thereto.

I have, &c.,

A. H. B. PEARCE,
Director of Medical Services.

I.—ADMINISTRATION.

A.—STAFF.

Appointments.—C. C. Sachs, Sanitary Inspector, 1st January; F. A. Taylor, X ray Technician, 1st January; J. E. Pery Johnston, Technician Pathological Laboratory, 13th January; P. Burge, Clerk, Makongai Leper Hospital, 17th February; Rev. Sister Mary Gaetan, Nursing Sister, Makongai Leper Hospital, 1st March; Miss A. M. Walton, Sister, Colonial War Memorial Hospital, 3rd March; Dr. D. C. M. Macpherson, Pathologist, 3rd April; Miss M. M. Tinline, Probationer Nurse, Colonial War Memorial Hospital, 28th April; Miss B. A. Colledge, Probationer Nurse, Colonial War Memorial Hospital, 28th April; R. B. Fyfe, Sanitary Inspector, 6th June; W. A. Milne, Sanitary Inspector, 6th June; Miss A. Storck, Sister, Lautoka Hospital, 22nd June; Rev. Sister Mary Gabriel, Nursing Sister, Makongai Leper Hospital, 26th June; Rev. Sister Mary Zita, Nursing Sister, Makongai Leper Hospital, 24th July; Dr. J. S. Cramer, District Medical Officer, 24th July; Dr. D. C. M. Macpherson, Acting Medical Officer of Health (conjoint), 1st September; Miss E. E. Deighton, Probationer Nurse, Colonial War Memorial Hospital, 1st September; Miss M. Harcourt, Fourth Class Clerk, 20th October; Miss A. Lane, Probationer Nurse, Colonial War Memorial Hospital, 14th December.

Resignations.—H. E. Ellis, Sanitary Inspector, 28th February; Rev. Sister Mary Valentin, Nursing Sister, Makongai Leper Hospital, 1st March; Miss C. B. Little, Sister, Lautoka Hospital, 7th April; Miss L. Dick, Sister, Lautoka Hospital, 10th May; Miss W. Delugar, Sister, Colonial War Memorial Hospital, 26th July.

Post abolished.—J. G. C. Campbell, Bacteriologist, 3rd April.

B—LEGISLATION AFFECTING PUBLIC HEALTH AND THE MEDICAL SERVICES ENACTED DURING THE YEAR.

The following By-laws, Resolutions and Declaration were passed during the year:—

By-laws.—
Suva (Garbage Disposal) By-laws.
Suva (Animals) By-laws.

Resolution.—
Under the Public Health Ordinance (No. 29 of 1935), fixing the boundaries of Rural Sanitary Districts.

Declaration.—
Declaring silicosis to be an infectious disease class B, Schedule A, Public Health Ordinance No. 29 of 1935.

C—FINANCIAL.

The total expenditure under the two heads, Medical and Hospital, was:—

	1934.	1935.	1936.
Personal emoluments	£38,974 10 2	£40,468 7 4	£41,028 0 2
Other charges ..	35,505 19 10	37,583 17 10	40,057 11 11
Totals ..	£74,480 10 0	£78,052 5 2	£81,085 12 1

The revenue creditable to the Medical Department was:—1934, £9,383 19s. 3d. 1935, £10,374 3s. 2d.; 1936, £13,699 19s. 11d.

The daily cost per patient at the Medical Institutions of the Colony in 1935 and 1936 was respectively:—

	1935.	1936.
	s. d.	s. d.
Colonial War Memorial Hospital . ..	5 8·1	5 8·4
Lautoka Hospital	3 9·1	3 8·6
Levuka Hospital	4 10·2	5 0·3
Lambasa Hospital	4 0·7	2 6·4
Public Lunatic Asylum	2 5·5	2 4·4
Central Leper Hospital	1 5·2	1 4·1
Provincial Hospitals	1 6·1	0 10·9
Nandi.	2 0·8	2 0·3
Penang	3 1·1	1 9

Further details are given in Appendices A to C.

The Revenue of the Colony for 1936 amounted to £796,629 16s. 6d. Of this sum, £81,085 12s. 1d. was expended on Medical Services. The Revenue received amounted to £13,699 19s. 11d. The net cost, therefore, was £67,385 12s. 2d., or 8·4 per cent. of the total revenue.

II.—PUBLIC HEALTH.

I.—GENERAL REMARKS.

Two important sets of by-laws have been made by the Local Authority for the Urban Sanitary District of Suva under sections 54, 127 and 128 of the Public Health Ordinance No. 29 of 1935, *viz.*, the Suva Animal By-laws 1936, which control the keeping of any animal within certain areas, and the Suva Garbage Disposal By-laws 1936, which effectively control the disposal of garbage in the Urban Sanitary District of Suva.

A resolution was made by the Central Board of Health, and approved by the Governor in Council under the Publice Health Ordinance No. 29 of 1935, whereby the boundaries of Rural Sanitary Districts throughout the Colony were fixed and defined. Under the old Public Health Ordinance of 1911, now replaced by the Public Health Ordinance of 1935, the Colony was divided into Urban and Rural Sanitary districts, the former comprising municipalities and the latter those parts of the Colony outside such municipalities. The new Public Health Ordinance of 1935 now divides the Colony into Urban Sanitary, Township Sanitary, and Rural Sanitary, districts. There has been no alteration in the definition of Urban Sanitary districts, while Township Sanitary districts comprise all settlements proclaimed as townships under the Townships Ordinance 1928.

In view of the importance of the gold mining industry which has recently been developed in the Colony, employing a large number of Europeans, Fijians and Half-castes, another important step in safeguarding public health was the declaration of Silicosis to be an infectious disease under the authority of Class B. Schedule A. Public Health Ordinance No. 29 of 1935. The question of silicosis arose as the result of a report by Mr. Grieve, Inspector of Mines in Fiji. Samples of ore were sent to Dr. Edwards of the Commonwealth Council of Scientific and Industrial Research for examination. These samples were found to be rich in sericite, and in his opinion, constituted a danger to the health of those engaged in the mining industry.

The opinion has been held for many years that quartz dust is the main factor in the causation of Silicosis, but, as far as I am aware, no scientific proof exists that this mineral is the main factor in the ætiology of Silicosis. Dr. Edwards, as a result of his examination, apparently considers that the fibrous silicate (sericite) may also be an important factor in the cause of this disease. It would be a cause for regret if any such menace to the health of those engaged in the Fiji mines was not safeguarded in every possible way by the adoption of modern methods for prevention and control.

The problem of Silicosis is obviously of a two-fold nature. The first part lies wholly in the province of the engineer, and the second concerns the Medical Department. In order that the Health Officer may play his part more fully in the prevention and control of this devastating disease it is proposed that the following Public Health measures should be adopted as early as possible:—

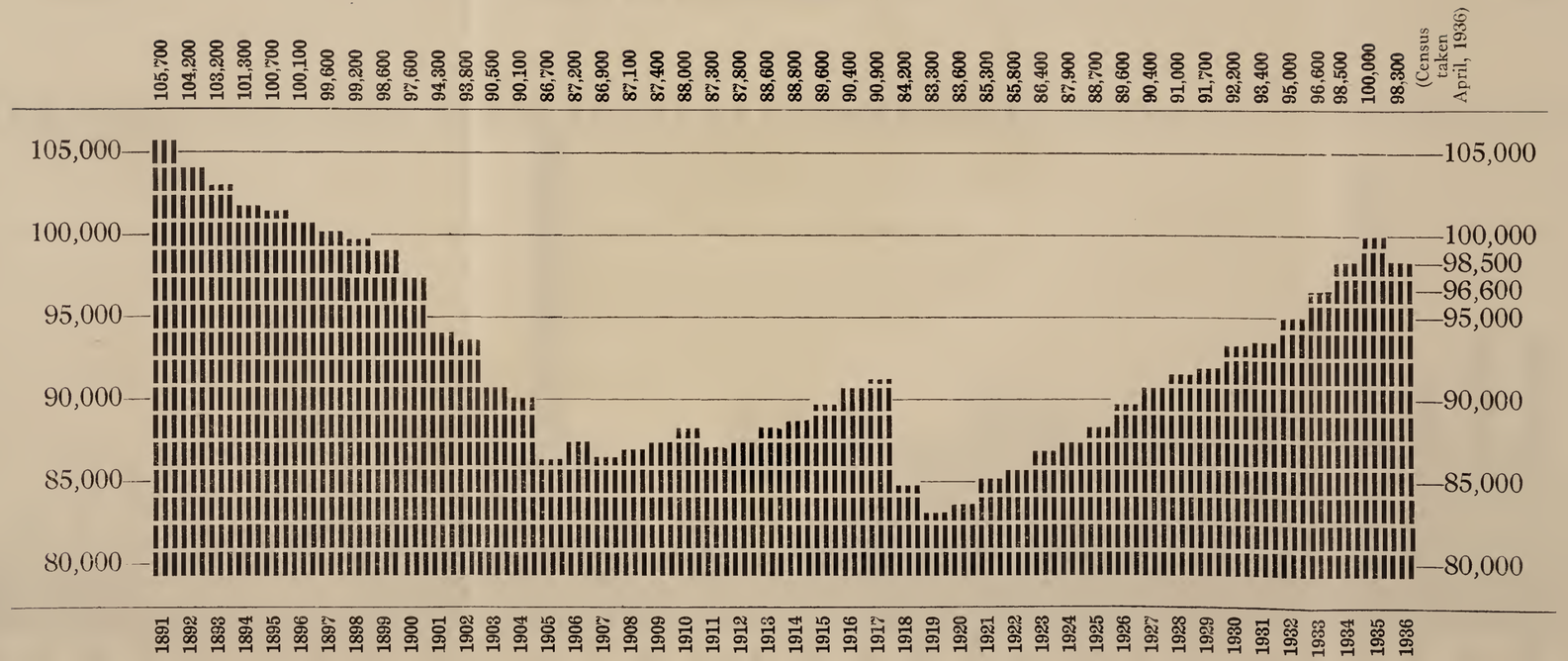
(*a*) All Natives and Europeans, prior to their engagement in the actual mining and crushing of the ore, shall be medically examined, and before any such employee is engaged he must be in possession of a certificate of physical fitness;

(*b*) periodical re-examination of mining employees shall be made at regular intervals, and the certificate of fitness be either renewed or withdrawn in accordance with the findings;

(*c*) every case of Silicosis discovered shall be immediately notified to the Medical Department, in accordance with Schedule A, Class B, of the Public Health Ordinance No. 29 of 1935.

GRAPH A.

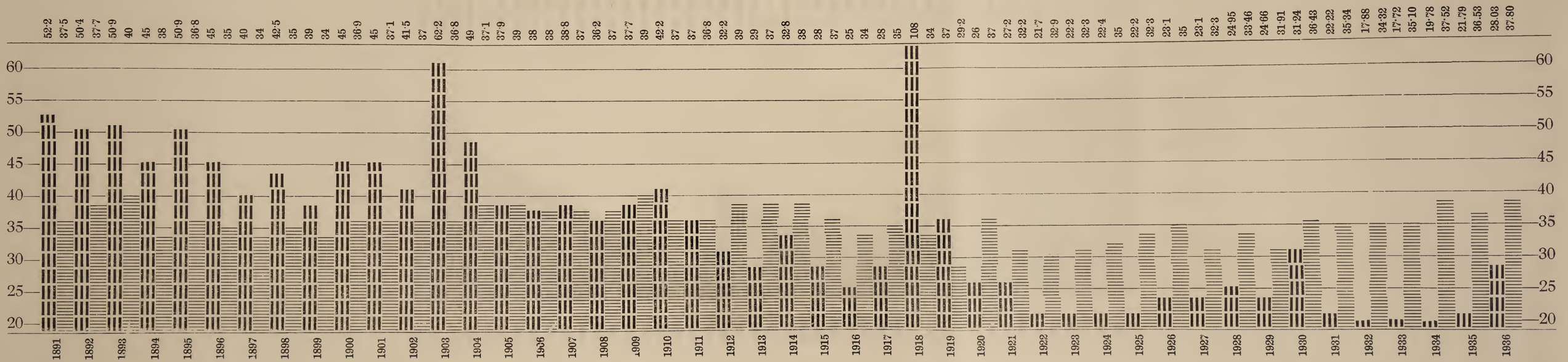
SHOWING THE DECREASE AND INCREASE IN THE FIJIAN RACE FOR THE LAST 46 YEARS.



GRAPH B.

SHOWING THE DEATH AND BIRTH RATE IN THE FIJIAN RACE FOR THE LAST 46 YEARS.

Note.—The thick perpendicular lines indicate the rise and fall in the death-rate; the thin horizontal lines show the rise and fall in the birth-rate.



Public Health Regulations.—It has been felt for some time that the absence of adequate Public Health Regulations was proving a serious handicap to Health Officers and Sanitary Inspectors, particularly with regard to the erection of new dwellings and buildings, and sanitary arrangements and fittings.

At the present time there are well over 100 sets of Public Health By-laws in force in the various sanitary districts in the Colony, including no less than 23 sets of dwelling-house by-laws. This unsatisfactory state of affairs renders the work of the officers responsible for sanitary inspection very complicated and difficult, especially where one officer covers several sanitary districts, each with a more or less different set of by-laws. Under the provisions of the Public Health Ordinance No. 29 of 1935, a new set of Public Health Regulations having more than 200 clauses, has been drafted during the year. These Regulations will replace all existing By-laws made under the old Public Health Ordinance of 1911, and will provide a uniform code of sanitation throughout the Colony. The principal aim in drafting these new Regulations was the condensation and simplification of the existing By-laws and Regulations, with the addition of the minimum amount of new matter consistent with present requirements. At the present time public health legislation is being constantly re-drafted in all parts of the world, and it is doubtful whether any set of regulations will be entirely satisfactory for a longer period than five years. I feel certain however, that the new sanitary code, if energetically and conscientiously applied, will bring about a tremendous improvement in the existing sanitary conditions. The new Regulations are at present being considered by the Governor in Council, and it is hoped will shortly be approved and become law.

Nutrition and Dietetic deficiencies in Native Diets.—The Secretary of State's despatch on this subject, dated the 18th April last, is most interesting, and raises a vital question. It has been recognised for some time past by the Medical Department that little was known regarding the adequacy or otherwise of native foods, and the possible effects of diet on the general physical condition of the Natives, especially with regard to their resistance to disease. It is proposed to appoint a Standing Committee, who will supervise all research work undertaken on this important subject. Thanks to the assistance of the Rockefeller Foundation, the Colony now possesses a well-equipped Pathological Laboratory, with a Biochemical Department in which suitable research methods and scientific investigations can be satisfactorily carried out.

The total estimated population at the end of December, 1936 was 201,086 including 98,291 Fijians, 86,778 Indians and 4,159 Europeans.

The number of the Fijian population according to the 1936 figures is 2,302 less than the estimated population at the end of 1935 (99,953), which was derived from adding the excess of births over deaths in each year since 1921 to the 1921 Census figures. Either the figures of the 1921 Census were excessive or the 1936 figures are incomplete or the returns of births and deaths are inaccurate.

The European population has decreased by 779 and the Half-caste population has increased by 800. This would appear to be due to a stricter adherence to the definition of the term "Half-caste."

The total death-rate for the Colony in 1936 was 20·17 per thousand, as compared with 15·30 in 1935.

The Fijian death-rate was 28·03 per thousand, as against 21·79 in 1935. The enhanced rate was due chiefly to dysentery, enteric fever and pneumonia.

The mortality rate of the Indian population was 12·32 per thousand, as against 8·10 in 1935. This increase was due mainly to dysentery and pneumonia.

The birth-rate for the Colony was 37·96 per thousand, as against 36·28 for 1935, an increase of 1·68.

From a public health point of view the year was certainly not a good one. The 1936 figures (allowing for any discrepancies in the 1921 and 1936 Censuses) clearly show a higher total death-rate than for some years past.

Bacillary dysentery, chiefly of the Shiga variety, has been prevalent during the year, principally in North Western Viti Levu and Rewa districts. For the first and second quarters of the year, 400 and 492 cases respectively were notified, and for the third and fourth quarters, 337 and 516 respectively. Of these cases 41 were Amœbic and the remaining 1,704 were Bacillary, making a total for the year of 1,745 cases with 148 deaths, as against 917 cases with 79 deaths in the previous year. This represents an increase of 828 cases and 69 deaths over the 1935 figures, with a mortality rate of 8 per cent. 1,171 of the total cases were admitted to hospital, as against 751 cases treated in hospital in 1935. From specimens submitted to the Bacteriological Laboratory from cases in the Suva district, the following results were obtained as to type:—

Shiga	34	Flexner	22
Schmitz	12	Sonne	5

The greatest number of cases were reported from the Rewa district, where the total number was 396 with 44 deaths, making a mortality case rate of 11·1. The race incidence of the total 1,745 cases reported for the year is rather interesting. The Fijians had the highest number of cases with 1,209, the Indians come next with 469 cases, and the Europeans and Others, including Half-castes, had 31 and 36 cases respectively. There is no doubt that the large number of cases reported from the Rewa district is due less to defective soil sanitation than to polluted water supplies. The whole question of an improved and purified water supply for the Suva–Rewa area is under consideration by the Public Works and Medical Departments. It is proposed to instal a chlorinated and filtered pipe-borne water supply system throughout this district. I feel confident that the realisation of this project will largely eliminate these seasonal epidemics of bacillary dysentery. The opening up of Viti Levu by the construction of nearly 400 miles of road has given much easier and more frequent access to Fijian towns which formerly were rarely visited, and has thus facilitated the spread of infection from one district to another.

The Colony was also visited by an epidemic of measles, which spread throughout the Group, with a total of 3,328 cases notified. The mortality rate from the disease itself was practically nil, except where respiratory complications developed. The respiratory complications were chiefly broncho-pneumonia, with 109 cases among Fijians and 73 among Indians. Of the 3,328 cases notified, the Indian race returned 241, European 116, Fijian 2,884 and Others 87. Since the tragic epidemic in 1875 which caused the death of nearly 20 per cent. of the Fijian population, the Fijians have undoubtedly acquired a certain degree of immunity against measles.

Pneumonia.—In 1935 there were 149 cases of pneumonia treated in hospitals throughout the Colony with 36 deaths. This year the number rose to 409 with 139 deaths, an increase of 260 cases with 103 deaths. This serious rise in the pneumonia rate during the year is accounted for by the measles and influenza epidemics which swept throughout the Colony. The figures for the latter disease for 1936 show an increase of 841 over those of the previous year. These epidemics were however of a mild type unless complicated by pneumonia.

Enteric fever showed a marked increase with 188 cases, of which 181 were treated in hospitals with 28 deaths. Whereas in 1935, 109 cases were notified, of which 101 were treated in hospitals with 18 deaths.

The mass inoculation of the population against typhoid is being continued as in previous years. During the year 20,500 inoculations were given. Of the 188 cases of typhoid reported for the Colony, the Rewa district accounted for 38, and it is anticipated that the proposed provision of an adequate and purified piped water supply will tend to a substantial decrease in the incidence of the disease in this area.

During the year the following work was carried out by the Soil Sanitation Campaign:—

No. of homes surveyed.	No. of holes dug.	No. of holes bored.	No. of slabs supplied.	No. of latrines completed.
487.	1,516.	312.	1,853	1996.

A total of 2,242 slabs were manufactured during the year.

The following returns relative to infectious diseases have been prepared by the Medical Officer of Health, and are submitted as appendices to this report, namely:—

(*a*) Table I.—Infectious diseases—notification by districts.
(*b*) Table II.—Infectious diseases—notification (cases) by nationalities.
(*c*) Table III.—Infectious diseases—notification by monthly incidence.

II.—COMMUNICABLE DISEASES.

Enteric fever.—One hundred and eighty-eight cases were reported for the Colony, being an increase of 79 cases over the 1935 figures.

Epidemic dropsy.—Five cases in all were notified for the year—one, that of an Indian from Mba, and 4 cases were reported from the Suva Gaol as against 15 cases last year. Considerable doubt exists however as to whether the Gaol cases could be ascribed to true dietetic deficiency.

Influenza.—An epidemic of this disease swept throughout the Colony. 1,358 cases were reported for the year—an increase of 841 cases over 1935. The disease was, on the whole, of a mild type.

Ankylostomiasis.—The hookworm campaign is now under the control of the Medical Department, which took over this important work from the Rockefeller Foundation in 1934. The drugs used were carbon tetrachloride and tetrachlorethylene and 6,351 people were treated.

Small-pox vaccinations.—3,500 persons were vaccinated against small-pox during the year. Fresh lymph is received monthly from New Zealand, and is distributed to the District Medical Officers and Native Medical Practitioners who, during the tours of their districts, vaccinate school children and unvaccinated adults. The Medical Officer of Health submits a report, included under the Scientific section, on the results obtained by vaccination with the dried calf lymph which was kindly supplied by the Pasteur Institute at Java. The results obtained are interesting and encouraging.

Scabies.—Cases of scabies were treated wherever found. 1,736 cases were treated during the year as against 1,529 last year. The Child Welfare Workers are particularly active in treating this skin condition, which in the past was very prevalent among children. Fijians now show a contempt for any person suffering from this disease, which shows they are becoming more alive to personal hygiene.

Dysentery.—This disease, I think, now can be accepted as endemic in the Colony, and although it is of a mild type, it is responsible for a high mortality among children under five years of age. It is undoubtedly seasonal, as with the advent of the cool season the number of cases diminishes considerably. There were 1,745 cases notified during the year, as against 917 in 1935.

Anti-malarial measures.—Fiji is fortunate in being a non-malarial country in that Anopheline mosquitoes are not indigenous. The Port Health Authorities therefore take the most stringent precautions to prevent the introduction of this mosquito.

Yaws.—The total number of cases reported was 3,198, as against 2,612 last year. This increase over last year is not due to an actual increase in the disease, but to the number of cases reporting for treatment. 7,500 injections of N.A.B. were given by the Medical Department, as against 6,253 last year.

Filariasis.—The *Megarhinus splendens* which was imported by the Government Entomologist in 1932, and has been bred through several generations by the Health Department, has been liberated throughout the Colony, and it is hoped will have a marked effect in reducing the number of *Aëdes variegatus*.

Diphtheria.—Clinically this disease is rare. 21 cases were notified during the year, from which the Klebs-Loeffler bacillus in more or less pure culture was isolated.

Tuberculosis.—Instructions have been issued for District Medical Officers and Native Medical Practitioners to keep a careful watch for all cases of tuberculosis and report them to the Health Department. The returns this year show an increase of 42 cases over last year. Whether this is an actual increase in the disease is doubtful, and is more likely due to better notification. Dr. Lambert, the local Director of the Rockefeller Foundation, proposes to make a tuberculosis survey of the Colony. His results and findings will be interesting.

The returns reported during the last six years are as follows:—

Year.	*Cases.*	*Deaths.*	*Year.*	*Cases.*	*Deaths.*
1931	226	57	1934	289	54
1932	286	39	1935	238	45
1933	313	61	1936	280	59

Leprosy.—The island of Makongai which, in the year 1911, was purchased by the Government and utilized as a leper station is about $2\frac{1}{2}$ miles long and $1\frac{1}{2}$ miles wide. This institution completed its twenty-fifth anniversary in 1936. The island is arbitrarily divided into a patients' area and a clean area which is *tabu* to patients. No boundary fence is required and the recognised dividing line is loyally observed by the patients. The steady increase in the number of patients has necessitated a greatly increased staff, which now consists of 15 European Sisters of the Society of Mary and 10 Fijian Sisters of the same Order. There is no doubt that without the enthusiastic work of these devoted women the results obtained would have been impossible. The recent award by His Majesty the King, of the honorary M.B.E. Civil Division to the Reverend Mother Agnes, Sister in Charge, was much appreciated by the staff, patients, and all connected with this institution.

Forty patients were transferred to Makongai from the island of Mbengga, the original lazarette, in 1911, when Makongai was opened as a leper hospital. This number has grown steadily year by year until the total head count at the end of 1936 numbered 575. During the quarter of a century during which this institution has been in operation, over 2,000 patients have been admitted.

III.—VITAL STATISTICS.

The graphs A and B, introduced in the Annual Report, 1932 have been extended for 1936, and show that the steady improvement in the birth over the death-rate of the Fijian race has been maintained.

The estimated population at the end of 1935 and 1936 (Census was taken on April 26th, 1936) was:—

Race.	Males, 1936.	Females, 1936.	Total, 1936.	Total, 1935.	Increase.	Increase per cent.	Decrease.	Decrease per cent.
Europeans	2,311	1,848	4,159	4,938	..	..	779	15·77
Half-caste	2,365	2,281	4,646	3,846	800	20·54	..	..
Fijians	50,126	48,165	98,291	99,953	..	..	1,662	1·62
Rotumans (all races)	1,425	1,419	2,844	2,561	283	11·05	..	..
East Indians	49,120	37,658	86,778	85,892	886	1·03	..	..
Polynesians	1,009	453	1,462	1,982	..	..	520	2·62
Chinese	1,504	288	1,792	1,486	306	20·05	..	..
Others	590	524	1,114	1,394	..	..	280	20·09
Total ..	108,450	92,636	201,086	202,052	2,275	..	3,241	..

The number of births recorded during the last four years was:—

Race.	1933.	1934.	1935.	1936.	Crude birth-rate per 1,000, 1936.
Europeans	77	42	62	64	15·39
Half-castes	146	90	162	160	34·44
Fijians	3,393	3,696	3,652	3,715	37·80
Rotumans	127	92	132	109	38·33
East Indians	3,132	3,098	3,210	3,484	40·15
Polynesians	40	39	54	26	17·78
Chinese	22	20	23	20	11·16
Others	29	119	35	56	50·27
Total ..	6,966	7,196	7,330	7,634	37·96

The general birth-rate in 1935 was 36.28.

The number of deaths recorded during the past four years was:—

Race.	1933.	1934.	1935.	1936.	Crude death-rate per 1,000, 1936.
Europeans	42	33	34	33	7·93
Half-castes	33	34	33	52	11·19
Fijians	1,713	1,948	2,178	2,755	28·03
Rotumans	63	115	69	67	23·56
East Indians	921	845	716	1,069	12·32
Polynesians	56	51	44	45	30·78
Chinese	10	4	10	15	8·37
Others	9	24	7	20	17·95
Total ..	2,847	3,054	3,091	4,056	20·17

The general death-rate for 1935 was 15·30.

The marriages, births, deaths and natural increase for 1936 were:—

Race.	Marriages.	Births.	Deaths.	Increase.	Decrease.
Europeans	31	64	33	31	..
Half-castes	32	160	52	108	..
Fijians	817	3,715	2,755	960	..
Rotumans	29	109	67	42	..
East Indians	903	3,484	1,069	2,415	..
Polynesians	3	26	45	..	19
Chinese	..	20	15	5	..
Others	13	56	20	36	..
Total ..	1,828	7,634	4,056	3,597	19

The rates of natural increase were:—Europeans, 6·28 per thousand; Half-castes, 28·08; Fijians, 9·5; Indians, 28·11; Chinese, 3·36. The natural increase of all races was 17·71 per thousand.

INFANTILE MORTALITY, 1936.

Race.	No. of deaths under 1 year.	Rate per 1,000 births.	No. of deaths 1–5 years.
Europeans ..	2	31·25	...
Half-castes ..	10	62·5	14
Fijians	522	140·51	514
East Indians ..	283	81·23	130
Polynesians ..	2	76·92	4
Others	3	53·57	2
Rotumans ..	16	146·79	4
Total ..	838	109·76	668

The number of Native births for 1936 was 3,715 against 3,652 in 1935, an increase of 63. The Indian births in 1936 were 3,484 against 3,210 in 1935 an increase of 274. The birth-rate per 1,000 of the whole population increased from 36·28 in 1935 to 37·96 in 1936.

The total number of deaths registered in 1936 was 4,056 an increase of 965 on the previous year's figures. The death-rate per 1,000 of the Fijian population increased from 21·79 in 1935 to 28·03 in 1936 and the Indian death-rate increased from 8·10 to 12·32.

The Fijian infant mortality per 1,000 births increased from 126·51 in 1935 to 140·51 in 1936, and the Indian rate increased from 63·24 to 81·23.

The increase in the infantile mortality was due to epidemics of mumps, influenza, measles, dysentery and whooping cough. These diseases were present in all parts of the Colony.

HEALTH STATISTICS OF EUROPEAN AND NATIVE OFFICIALS.

	Europeans.	*Natives.*
Total number of officials resident	361	569
Average number resident	336	529
Total number on sick list	168	221
Total number of days on sick list	1,745	1,889
Average daily number on sick list	2·1	2·5
Percentage of sick to average number resident	32·1	41·7
Average number of days on sick list for each patient . ..	10·4	8·5
Average sick time for each resident	4·8	3·3
Total number invalided out of the Colony	12	2
Percentage of invalidings to total residents	3·3	·35
Total deaths	1	2
Percentage of deaths to total residents	·277	·351
Percentage of deaths to total average number of residents ..	·297	·378

Health of Officials.—Free medical attention is not given to all officials and the majority of officers receive attention from private practitioners. The foregoing statistics are therefore approximate.

III.—HYGIENE AND SANITATION.

GENERAL REVIEW OF THE WORK DONE AND PROGRESS MADE,

Sanitary Inspections in Suva Rural District.—Systematic house-to-house inspection and re-inspection has been continued throughout the year, the following visits have been made:—

Inspections	2,890
Re-inspections	2,058
Total ..	4,948

During the year the sanitary district of the Suva rural area has been extended as far as the Rewa River, and this enlarged area has greatly increased the work of the staff. The actual area covered by house-to-house inspections is now 40–50 square miles, and includes all sections of the sanitary district which are populated. The number of buildings recorded in the Health Office is 2,445 and these buildings are occupied by a total population of 11,113.

Existing Sanitary Conditions.—The following particulars show the present conditions of the 2,445 recorded buildings in the Suva Rural Sanitary district.

SANITARY ACCOMMODATION.

Served by cement slab latrines	2,064
Served by box seat latrines over pits	99
Served by septic tanks	218*
Served by drop or pan latrines	19
Unoccupied premises—approved sanitary accommodation before re-occupation	36
Premises not provided with sufficient sanitary accommodation	9†
Total	2,445

* These include several septic tanks under construction.

† Includes 3 premises occupied by blind persons. 2 premises occupied by destitute persons. 4 premises at a great distance from nearest road.

WATER SUPPLY.

Served by pipe supply	878*
Served by tanks	420
Served by river water	215
Served by protected wells	766
Served by unprotected wells	166
Total	2,445

* There are in addition many premises within reasonable distance of a pipe supply at adjacent premises.

TYPES OF BUILDINGS.

Private dwellings	2,350
Tenement buildings	47
Stores, &c.	48
Total	2,445

Sanitary Improvements.—The response to notices given by the inspecting staff, on the whole, has been good, and the co-operation of the public with the Department has improved. The list of "Sanitary Improvements Completed" cannot be considered a final result of the inspections made, as many other improvements have come about as the result of advice given, and records are not available.

SUMMARY OF SANITARY IMPROVEMENTS COMPLETED DURING THE YEAR.

New privies constructed	114
Privies repaired or cleansed	787
Insanitary privies filled in	115
Septic tanks installed	1
Septic tanks repaired	1
Wells protected, covered or repaired	30
Insanitary wells filled in	39
New water tanks fixed	1
Water tanks repaired or covered	5
Pipe water supply laid on	13
New bathrooms or washing places constructed	10
Bathrooms and washing places repaired, cleansed or drained	10
Insanitary bathrooms demolished	10
New drains constructed	12
Drains repaired, cleansed or screened	350
Accumulations of rubbish removed	201
Bush, &c., cut	243
Nuisances from keeping of animals abated	12
Nuisances from dead animals abated	14
New kitchens erected	1
Kitchens repaired	2
Insanitary buildings demolished	25
Steps and stairways repaired	4
Floors repaired	1
Walls repaired	4
Total	2,005

This summary does not include sanitary improvements obtained where insanitary buildings have been demolished, and re-erected in compliance with the Public Health Regulations.

Written Notices and Legal Proceedings.—332 written notices were issued during the year. In three instances it was necessary to take legal proceedings for failure to comply with notices to provide water supply to buildings. In each instance a fine of £2 was inflicted.

Closing Orders.—Eight closing orders were issued in respect of insanitary dwellings, and in each instance the building was demolished. A total of 25 insanitary dwellings were demolished during the year, as the result of action by the sanitary staff.

Supply of Cement Latrine Slabs.—The supply of latrine slabs and lids through the Health Office has been continued, and during the year 45 slabs (14 flat type and 31 pedestals) were supplied for installation, as well as a large number of new plug lids for use in slabs already installed.

New Dwelling-houses.—During the year applications were received in respect of 195 proposed new dwellings. Visits were made to the sites before erection, and during the course of erection, to advise as to the requirements of the Dwelling-house By-laws.

Eighty-three certificates were issued in respect of dwelling-houses erected in accordance with by-laws. 965 visits were made in connection with the erection of new buildings. 16 new dwellings were erected to replace insanitary buildings demolished.

Anti-mosquito Work and General Clearing.—A gang of six men has been regularly employed clearing unoccupied Crown Lands in the Suva area. In addition, many main drains and small watercourses have been kept cleared. 268 loads of empty tins, bottles and refuse were removed and dumped. 269 latrines and accumulations of water have been oiled to prevent mosquito breeding. One man has been detailed to Suva Point, a rapidly growing suburb of Suva, clearing refuse and jetsam from the beach and culverts, and generally carrying out work to prevent the occurrence of nuisances.

Infectious diseases inquiries, &c.—

Visits in connection with infectious diseases, 420.
Premises disinfected, 84.

Discharged lepers and leper contacts were visited, and arrangements were made for periodical examination. Discharged lepers from Makongai were housed, and fed in Suva, whilst arrangements were made to send them to their homes.

Septic tanks.—As a result of the recommendations of a Committee appointed by the Central Board of Health, copies of plans of a standard septic tank approved by the Central Board of Health, have been printed and distributed throughout the Colony. In addition, suitable warning notices on the use of septic tanks, have been distributed. It is hoped that these measures will bring about an improvement in the construction and maintenance of septic tanks, which are being installed in increasing numbers year by year.

Sampling of Water Supplies.—During the year, to appease public anxiety regarding the purity of the Suva water supply, regular samples have been taken. The following samples were taken and submitted for examination since the beginning of August:—

Source.	Samples for Bacteriological Examination.	Samples for Chemical Analyses.
Shipping Main	18	1
High Level Main	17	1
Low Level Main	18	1
Six-inch Main at Tamavua Slaughter-house	4	.
Reservoirs	3	.
Intake Heads	6	.
Rewa River	2	.
	68	3

The water as delivered to the consumer may apparently be safe and palatable, but I do not think it can be rated as an attractive or a high class water judged by the usual standards. Bacillus coli is found in small quantities of the water and, whatever the origin of this organism, the fact remains that it is present and must, in the present state of our knowledge, be taken as an index of pollution. Chlorination of the water seems to be the easiest and most effective way of safeguarding the community, and it is proposed to adopt this process shortly.

Twenty-three samples of water have been taken from the Suva Sea Baths and submitted for bacteriological examination. The result of these examinations reveals the fact that the bacterial state of the Baths is actually better than that of the lower level fresh water main in the Suva water supply system.

MEDICAL INSPECTION OF SCHOOL CHILDREN.

Girls' Grammar School.—The standard of the health of the pupils was good. Of 188 pupils examined between the ages of 5 and 18 years, 102 pupils were found to have carious teeth. Many of the younger children have several teeth filled, indicating that the parents are alive to the importance of dental care. Parents were notified of carious teeth and advised to consult a dentist. 94 pupils had enlarged tonsils, in several cases accompanied by enlarged cervical glands. Throat swabs taken at random revealed one case of positive diphtheria, while several yielded growths of the non-hæmolytic streptococcus, Staphylococcus aureus and the Streptococcus viridans. A case of scoliosis was admitted to the Colonial War Memorial Hospital for treatment.

Boys' Grammar School.—The health of the pupils was, on the whole, good. The installation of hot shower baths and improvements in the diet have resulted in fewer cases of boils and other skin conditions during the year. There was an epidemic of mumps during the later part of the year; one dormitory was used as an isolation ward, under the care of Mrs. de Montalk, while several of the more severe cases were isolated in Hospital.

Of 103 pupils examined, there were 38 cases of enlarged tonsils, 17 cases showing enlarged cervical glands. Among the same pupils there were 39 cases of carious teeth. A large proportion of pupils had several teeth filled, indicating that while dental caries is common in Suva among European school children, many parents are alive to the importance of dental care. As there is no school dental officer and no diet campaign has been initiated in Suva, parents were notified of the condition of the teeth of their children and urged to seek immediate dental advice, the same step was taken regarding tonsils. One pupil was found to have scoliosis. His father was notified by the Head Master and by the School Medical Officer. Throat swabs taken at random did not reveal any diphtheritic condition, the commonest organisms being the non-hæmolytic streptococcus, the Staphylococcus aureus and the Streptococcus viridans.

It is proposed that research work will be carried out in the Suva Pathological Laboratories in co-operation with Health Officers, on the question of diet for European and other children in Fiji.

Queen Victoria School.—The general health of the pupils of this school during the year was, on the whole, good. 78 pupils attended the school in 1936. An epidemic of mumps occurred; the patients were isolated and treated in a special dormitory. There were 59 cases of mumps, 6 cases of influenza, 13 cases of bronchitis, 13 cases of trachoma and 1 case of rheumatic fever. There were also one case of valvular disease of the heart and one case of osteomyelitis.

The stools of 59 cases were examined and in only one case was hookworm ova found.

Of skin diseases there were:—

8 tropical ulcers.
22 scabies.
11 acne.
1 tertiary yaws.
5 kara, 14 ndani } Fijian names for mild fungus infections

No case of primary yaws was noticed and no case of pulmonary tuberculosis.

Inoculation against typhoid was carried out in 123 cases; 9 pupils were circumcised and 22 cases were treated for scabies. Tooth extraction was necessary in 51 cases.

In a medical inspection carried out in December, 56 pupils were examined; of these 22 had carious teeth, which were treated by extraction. There were no cases of scabies. There was one case of ear-ache, one of an ulcer of the foot, and one of boils. Improvement in the diet in recent years largely accounts for the better health of the pupils and the lessened number of carious teeth.

The school was visited weekly during the latter half of the year by Native Medical Practitioner Vilikesa Ramangga, Dispenser at the Colonial War Memorial Hospital, who was painstaking in his work of elimination of skin disease and the care of the pupils during illnesses.

It is proposed to carry out extensive Kahn tests next year with the co-operation of the Government Pathologist to co-relate the effect of treatment carried out in Kahn positive cases two years ago.

TOWN-PLANNING AND BUILDING REGULATIONS.

The business part of the town of Suva is changing from a collection of temporary premises, erected without much attention to future requirements, to permanent buildings in concrete. These new buildings are rapidly springing up at the more important strategic sites, and there is urgent need for careful town-planning and adequate building regulations, if expensive mistakes are to be avoided. The laying down of improved and wider roads has done much to improve the appearance of parts of the business area, and the widening of Thomson Street bridge now facilitates traffic between the port and town. The European settlements at Suva Point and Lami are proving popular, and their boundaries are extending.

During the year it was decided to carry out a complete survey of Suva in order that a town-planning scheme might be formulated. It is estimated that this survey will occupy a period of two years.

IV.—PORT HEALTH WORK AND ADMINISTRATION.

Inspections.—Inspections for the year included—Incoming vessels boarded 147; inspections of shipping for mosquitoes 24; special inspections of overseas vessels for rats 15.

Disinfection.—Many consignments of imported second-hand clothing have been examined during the year. Where the goods are not accompanied by a certificate of disinfection issued at the place of origin, special precautions have been taken to ascertain whether or not treatment has been given, and if not thorough disinfection is carried out in Suva. 264 articles were passed through the steam disinfecting chamber on the "Pioneer" Wharf, and approximately 3,500 articles through the steam disinfector at Nukulau Quarantine Island. One overseas vessel, on which cases of infectious disease had occurred, was disinfected throughout.

Cleansing Work.—The foreshores near to Suva have been regularly inspected and cleared of accumulations of rubbish and jetsam weekly.

Inspection and fumigation of Shipping and Anti-Rat Measures.—Vessels arriving from plague infected or suspected ports, vessels likely to be harbouring adult anopheles mosquitoes, overseas vessels not holding deratisation or deratisation exemption certificates issued within six months, vessels about to go on the slip or be docked for repairs, and local ships when up for six-monthly survey are fumigated by the Port Sanitary Staff.

Table PI.—Vessels Fumigated during 1936.

Description of vessel.	Method of fumigation.				Rats obtained.	
	Clayton Gas.	Clayton Gas and Cyanide.	Cyanide.	Total.	Total.	Average per vessel.
Overseas	1	..	13	14	16	1·2
Local	..	..	78	78	45	·6
Total ..	1	..	91	92	61	·7

" International " deratisation certificates issued—11.

The average number of rats per local vessel found after fumigation is lower than for 1935—·6 as compared with 1·6. The number of rats per vessel appears to have been reduced to the minimum which may be expected. In 1929, when regular six-monthly fumigation was commenced, the figure was 50 per vessel. The figure of ·6 for 1936 is a credit to the Port Sanitary Staff, and the efficiency of the local fumigation methods. During 1936 the use of cyanide " Units " was extended, and of the 92 vessels fumigated, " Units " were used in respect of 30. The makers are now supplying " Units " in an improved type of container and with the condemnation of the large Clayton Plant at the end of the year, " Units " will be used for the majority of fumigations. Our chief difficulty is still the question of storing large quantities of " Units " over long periods and stocks are being kept as low as possible, with an emergency stock of cube cyanide and sulphuric acid held as a stand-by should " Units " become exhausted. An Indian is employed in the Port and Town areas of Suva as a rat-catcher, and he has set traps and caught rats as set out in the following tables:—

Table PII.—Traps set and rats caught in Port and Municipal areas.

Spring traps.		Cage traps.		Sticky traps.	
Traps set.	Rats caught.	Traps set.	Rats caught.	Traps set.	Rats caught.
9,315	1,980	951	274	482	306

Total traps set	10,748
Total rats caught	2,560
Rats sent to the Laboratory for examination, (all found negative for B. pestis)	564
Poison baits laid	Nil.

It should be noted that in some instances traps set in dry weather may become non-effective by reason of heavy rains soon afterwards, thus tending to lower the number of rats caught for traps set.

Table PIII.—Species of Rats Caught.

Where obtained.	Species and numbers.		
	Black (*Rattus rattus*).	Brown (*Rattus norvegicus*).	Total.
Overseas shipping	16	..	16
Local shipping	45	..	45
Wharves, warehouses and residences	584	1,976	2,560
Total ..	645	1,976	2,621

Sanitation of Local Shipping.—When undergoing fumigation local vessels are inspected for minor sanitary defects, and where discovered these are remedied. The structural conditions of crew quarters on many of the Fijian vessels are far from satisfactory, and it is hoped to give this matter further attention.

Port Food Inspection.—The foodstuffs on vessels are examined when vessels are fumigated and during any other general inspection, and the following unsound goods were condemned during the year:—

Tinned meats and fish.	18 tins.
Tinned vegetables	22 ,,
Tinned cereals	11 ,,
Milk powder	5 ,,
Sundries.	4 packages.

Inspections of imported foodstuffs are made in the Customs sheds, and it is the practice for Customs Officers to report to the Health Office any foodstuffs they suspect to be unsound

This action has resulted in the condemnation and destruction of the following articles of food which were unfit for human consumption:—

Dhall	3	bags.
Corriander seed	1	,,
Tinned soups	2,250	tins.
Tinned peas	198	,,
Tinned milk	96	,,

V.—NATIVE CHILD WELFARE.

The Child Welfare Scheme, which is under the control of a Central Executive Committee of which the Acting Secretary for Native Affairs is the present Chairman, has been firmly established in the Colony, and, since its inception in 1927, has progressed steadily. In practically every village Child Welfare Committees have been established, each of which is responsible to the Child Welfare Worker in charge of the district. There are four trained European Nurses engaged in the work in various parts of Fiji, and they are assisted by 14 specially trained Native Nurses. District Medical Officers and Native Medical Practitioners make inspections and co-operate with the Child Welfare Workers. Native Medical Practitioners are given special training in Child Welfare work in order to enable them to render this service to their own people in the country districts.

Infant mortality among Fijian children under the age of five years, during the last four years is as follows:—

	1933.	1934.	1935.	1936.
Under one month..	88	99	99	98
Over one month, under one year	244	368	462	424
Over one year, under five years..	174	290	358	514

The increase in infant death-rate is largely due to epidemics of whooping cough, dysentery and measles.

VI.—HOSPITALS AND DISPENSARIES.

The Colonial War Memorial Hospital.—Special Committees have considered the whole question of hospital accommodation, both for patients and nursing staff. The site for the proposed new Children's Ward, the money for the erection of which was so generously given by the Honourable E. G. Theodore and his associates in the mining industry of the Colony, has been finally settled; plans and specifications prepared by the Public Works Department have been approved; and it is hoped this new building, which will fill a long felt want, will be erected shortly.

For some years past there has been an urgent need for new quarters for nurses. Owing to insufficient accommodation the present nursing staff have, in many instances, to share bedrooms, and to live under conditions which are most undesirable for European women in the tropics. A site for the proposed quarters has been selected, and the plans of the quarters approved. It is hoped that this building, which has been required for so many years, will be erected soon. The provision of £20,000 was made in the 1937 Estimates for the erection of new hospital buildings during the year.

The new Pathological and Bacteriological Department has been completed and is in occupation. Funds to assist in the erection and equipment of this important unit were generously given by the Rockefeller Foundation. This Department comprises the following sections:—Pathologist's office and library, main laboratory, vaccine laboratory, biochemical laboratory, parasitological laboratory and numerous accessory rooms. A full description of the structure will be found in the Pathologist's report which is printed as an appendix to this report.

In addition to these new buildings it is proposed, during the next three years, to erect many new wards and departments. Improved laundry facilities, and steam sterilization throughout the hospital have long been needed, and provision has been made to instal a modern up-to-date steam plant. A ward for the observation of mental cases, a maternity block and an isolation block are also under consideration for erection in the near future.

Nursing Staff.—On the advice of Miss Lambie, the Director of the New Zealand Nursing Service, who recently inspected this Hospital, it is proposed to re-organise both the European and Native Nursing staff by the gradual elimination of the European probationer nurses and their substitution by additional nursing sisters and staff nurses and the gradual transfer of the present European Training School to a Native Training Centre.

Miss Tennent, Director of the Division of Nursing of the Rockefeller Foundation, visited the School during the year, and investigated the possibilities of establishing a School of Public Health for Native Medical Practitioners and Native Nurses. Fijian and Indian sanitary inspectors would also receive training at this School. It was suggested that these people be taught preventive measures in medicine and hygiene, which knowledge they will be able to carry direct to Native villages and thereby help to solve the problem of infantile mortality. If this scheme is adopted and proves successful, it is intended to ask other Governments to participate on a similar basis to that which is in operation at the Central Medical School.

The erection of a health unit, where infant welfare clinics, tuberculosis clinics and antenatal clinics could be held is also under consideration.

The work of this Hospital continues to increase. There is accommodation for 170 patients, but this will be considerably augmented when the new buildings are completed. There were 3,074 in-patients treated during the year, as against 2,713 last year. 17,330 out-patients received treatment and the surgical procedures numbered 1,801.

The Central Medical School.—The usual final examinations were held during the last quarter of the year. Out of 11 students who sat for the examination, 10 passed and were granted certificates as qualified Native Medical Practitioners. One student failed in surgery and public health. In 1931 the course at the Central Medical School was extended from 3 to 4 years. The 4 year course is divided into a junior period of $1\frac{1}{2}$ years, and a senior period of $2\frac{1}{2}$ years. During their junior period the students attend the Medical School every morning and afternoon and received instruction in physics, chemistry, biology, anatomy and physiology. The senior students are on duty in the Hospital from 8 a.m. to 1 p.m. each day and attend lectures in the afternoons. They also act as dressers and clinical assistants, and form an integral part of the Hospital staff under the direction of the Medical Superintendent. The duties of the senior students in the Hospital, include work in the Medical Wards, Surgical Wards, Women's Wards, European Wards and in the Out-patient Department. It has been found from past experience that the performance of night duty by the senior students interfered with their health and studies. This duty has been abolished, and provision made in the 1937 Estimates for the employment of two night orderlies. A system of post-graduate study has been inaugurated at the Hospital. Selected Native Medical Practitioners of over five years standing are brought in from their districts in batches of two for a six months course. These Native Medical Practitioners do a tour of duty in the Operating theatre and the Out-patient and Surgical wards. They also attend lectures, assist at operations, administer anæsthetics, and attend post-mortems and demonstrations in the laboratory. They are responsible for the care and treatment of certain patients, and carry out such operations as radical cure of hydrocele, radical cure of hernia, relief of strangulated hernia, appendictomy, and are made familiar with the technique of spinal and local anæsthesia. In connection with child welfare work they attend the ante-natal clinic and visit neighbouring villages under Child Welfare control.

The following table shows the number and race of the students in each year of training in 1936:—

	1st year.	*2nd year.*	*3rd year.*	*4th year.*	*Post graduate.*	*Total.*
Western Samoa	2	2	.	.	.	4
Eastern Samoa	1	1	.	.	.	2
Tonga	2	1	.	1	.	4
Cook Islands	1	2	.	.	.	3
Gilbert and Ellice Islands	2	1	.	1	.	4
Solomon Islands . ..	1	1	1	1	.	4
New Hebrides	.	.	1	.	.	1
Nauru	.	1	.	.	.	1
Fiji—Fijians	4	4	.	5	2	15
Rotumans . ..	.	.	.	2	.	2
Indians	.	1	.	1	1	3
Totals ..	13	14	2	11	3	43

Lautoka Hospital.—This is the second largest hospital in the Colony, It is in charge of a senior District Medical Officer, and provides hospitalization for a thickly populated district. 2,059 in-patients and 6,797 out-patients were treated during the year. 1,908 surgical procedures were carried out; and of these 968 required general anæsthetics and 940 were of a minor nature. The nursing staff of this hospital consists of a Matron, 3 Sisters, 7 Native Nurses and 12 Native Nurses-in-training. These Nurses-in-training, after doing a two years course and satisfactorily passing an examination, receive a similar certificate to the Native nursing graduates from the Colonial War Memorial Hospital. The Native Medical Practitioner on the staff is a senior man, who was specially chosen because of his ability in giving anæsthetics and his hospital experience. A Native Medical Practitioner, who has had two years special training as a bacteriological technician, has been posted to this hospital, and has been of great assistance in the side room work. Lautoka Hospital was responsible for £880 16s. 9d. in revenue. There were 116 deaths in the hospital—a mortality rate of 5·64 per cent. and this compares favourably with the number of in-patients.

Levuka Hospital.—This is a general hospital and the oldest in the Colony. It is situated to the Northern end of the Township. The buildings stand in well kept grounds, fronting the main road, and have an outlook towards the sea. The main hospital block consists of the European and Native Wards, Out-patient building, operating theatre, dispensary and Sister's quarters; and in-patient accommodation is provided for all races. The European section consists of a small ward with 4 beds and a private ward with one bed. In the Native section there is a male ward with 6 beds, a female ward with 4 beds, and a smaller room, between these wards, which contains 2 beds. There is also an isolation ward in a separate building with accommodation for 8 patients. Thus normally the hospital has a bed capacity of 25. The staff consists of the District Medical Officer, a European Sister in charge, a Native Medical Practitioner, 3 Native Obstetric Nurses and a Native dresser. 304 in-patients and 4,066 out-patients received treatment during the year. There were 30 deaths in the hospital. 84 major and 234 minor operations were performed. 324 injections of N.A.B. and 355 anti-typhoid inoculations were given.

Lambasa Hospital.—This is a fairly new and well equipped hospital, which is able to do satisfactory work, in the centre of a large sugar growing district on the island of Vanua Levu. It is staffed with a District Medical Officer, a European Sister in charge, 3 Native Nurses, 1 Native Medical Practitioner, 1 Indian Medical Practitioner and 5 servants. 802 in-patients received treatment during the year, the daily average of in-patients being 34·22. 8,383 out-patients received attention, and there were 36 deaths in hospital. 730 N.A.B. injections and 6,113 anti-typhoid inoculations were given.

Ndreketi Dispensary is in charge of a Native Medical Practitioner. 25 in-patients and 1,346 out-patients received treatment during the year. 207 N.A.B. injections were given, 63 minor operations and 5 operations under general anæsthetics were performed.

Visongo Dispensary.—The Native Medical Practitioner who was in charge of this dispensary and who gave valuable service for a number of years, died during the year, and his place has been filled by a younger man. Treatment was given to 1,331 patients. 52 minor and 19 major operations were performed and 222 N.A.B. injections were given.

Nanukuloa Hospital.—This hospital is one of the oldest Provincial Hospitals in the Colony, and serves the larger part of the native population in the Ra district. 233 in-patients and 1,998 out-patients received treatment. 66 minor operations and 18 operations under general anæsthesia were performed. 219 people were given N.A.B. treatment for yaws and 16 given prophylactic treatment for tetanus. There were 27 deaths in hospital. 98 cases of dysentery were treated in this hospital during the year, of whom 22 died.

Penang Hospital.—This is a comparatively new and compact hospital, designed to accommodate Fijian and Indian patients only. 280 in-patients and 4,298 out-patients received treatment during the year. The number of minor operations was 290 and 34 operations were performed under general anæsthesia; 43 injections of N.A.B., 110 anti-typhoid inoculations and 26 prophylactic doses of anti-tetanic serum were given. 11 deaths occurred in hospital, 4 of which were due to dysentery.

Namarai Dispensary.—This is situated on the coast, and is reached by launch, which takes about two and a half hours from Nanukuloa. The dispensary is in charge of a Native Medical Practitioner assisted by a Native Nurse. 1,008 out-patients were treated and 315 arsenical injections were given during the year.

Taveuni Provincial and Cottage Hospitals.—There are two hospitals in the district of Taveuni. The Provincial Hospital for Natives and a Cottage Hospital for Europeans. Both are situated on the Government Station at Waiyevo. In addition to the District Medical Officer, there is a European Sister who is Matron of the Cottage Hospital. Two Native Medical Practitioners and two Native Obstetric Nurses are attached to the Provincial Hospital. The number of in-patients treated at the Provincial Hospital was 631. The daily average for the year was 20·4 as against 11·08 in 1935. 2,170 out-patients were treated. There were 272 minor and 6 major operations performed. 25 deaths occurred in hospital. 535 injections of N.A.B. were given. A small epidemic of enteric fever occurred in March in Mbutha Bay. 15 cases were brought to hospital for treatment, all of whom recovered.

The Child Welfare Work of this district is in the capable hands of Sister Forster, Matron of the Provincial Hospital. She has established Welfare Committees in all the Native towns she has visited. Under Sister Forster's guidance the mothers are taking greater care of their children, and are seeking medical aid earlier with the result that the children show a wonderful improvement in health.

Hospitals in Mba District.—There are four hospitals in this district, all within an area of five miles, which in my opinion is excessive. One good central hospital would be sufficient to meet the medical needs of this district.

Nailanga Hospital.—This is the principal Government hospital in the Mba district. It is primarily a Fijian institution, but Indians receive treatment as out-patients. The number of patients admitted to hospital was 453, the daily average being 15·02, and 1,370 out-patients attended for treatment. 14 major and 151 minor operations were performed. 91 cases of dysentery were treated, all of whom recovered. 167 injections of N.A.B. were given. There were 14 deaths in this hospital.

Mba Cottage Hospital is the only institution for Europeans and Half-castes in this district, and it is subsidised by Government. The Tavua gold mines have increased the work of this hospital very considerably. The number of in-patients admitted was 83, and 122 out-patients received attention. There was only one death.

Rarawai Hospital.—This is an old plantation hospital, owned by the Colonial Sugar Refining Company. The operating theatre has been recently modernised. 417 in-patients were admitted and 9,713 out-patients received treatment during the year. There were 20 deaths in hospital. 51 injections of N.A.B. and 31 anti-tetanic injections were given.

The Methodist Mission Hospital is also subsidised by Government, and caters for Indian women and children. A lady practitioner is in charge, assisted by 3 European sisters. There is an obstetric ward attached to this hospital, which is the only one on the Mba side of the island. 502 in-patients and 4,588 out-patients received treatment during the year. There were 25 deaths in hospital.

Savu Savu Provincial and Cottage Hospitals consist of 3 wards, 2 for natives and 1 used as a Cottage Hospital for Europeans. It is controlled by a District Medical Officer with a staff consisting of a Native Medical Practitioner and a Native Nurse. 107 in-patients and 1,845 out-patients were treated during the year. There were 6 deaths in hospital. 2 major and 52 minor operations were performed and 204 injections of N.A.B. were given.

Mbua Provincial Hospital is situated at Nambouwalu, and is in charge of a Native Medical Practitioner. The District Medical Officer, Savu Savu, visits this hospital frequently. 203 in-patients and 1,428 out-patients were treated. There were 6 deaths in hospital.

Nandronga Provincial Hospital.—This hospital serves the districts of Nandronga and Tholo West. There are 4 Native Medical Practitioners and 5 Native Nurses stationed in the two districts. 367 patients were treated in the wards of the hospital with 40 deaths. 87 cases of bacillary dysentery were admitted, and 16 of these died in hospital. A large percentage of these cases were very young children. The operations numbered 220, of which 38 were performed under general anæsthetics. Out-patients numbered 1,570 and 73 arsenical injections were given.

Rotuma Hospital.—This hospital is situated on the island of Rotuma, which is approximately 220 miles North of Fiji, and has a population of 2,740 people. The hospital is in charge of a Native Medical Practitioner who is assisted by a Native Nurse. 219 in-patients and 724 out-patients were treated during the year, and 2,860 injections of N.A.B. were given. The Native Medical Practitioner in charge of the hospital is a graduate of the Central Medical School, Suva. He performed 156 minor and 1 major operation. There were 13 deaths in hospital.

Nandi Hospital.—This hospital serves a thickly populated area, which comprises chiefly Indians. The staff consists of a Native Medical Practitioner, an Indian Medical Practitioner and 2 Native Nurses. 800 in-patients were treated, with 72 deaths. Of these in-patients 224 were cases of bacillary dysentery, 30 of whom died. 9,603 out-patients were also treated. 544 injections of N.A.B. and 912 anti-typhoid inoculations were given. The majority of deaths from dysentery were children under five years of age. Nearly all the cases were Indians from the rural areas.

Wainimbokasi Hospital serves the Provinces of Tailevu, Tholo East, Naitasiri and Rewa. There is a resident senior Native Medical Practitioner in charge, under the District Medical Officer, Rewa. 602 in-patients and 2,738 out-patients were treated and there were 61 deaths in hospital during the year. 10 major and 152 minor operations were performed, and 420 injections of N.A.B. were given.

Vunindawa Hospital.—This hospital is situated in the mountains of Tholo East Province, and is in charge of a Native Medical Practitioner with 2 Native Nurses to assist him. A severe epidemic of dysentery occurred in this district early in the year and 162 cases were admitted to hospital. 29 of these cases died. The total number of in-patients admitted was 321 and the deaths totalled 36.

The Nausori Plantation Hospital for the treatment of out-patients only, is under the control of the Colonial Sugar Refining Company. 5,973 out-patients received treatment. 1,191 anti-typhoid inoculations and 1,076 vermifige treatments were given.

The Native Medical Practitioners throughout the Colony treated 42,171 cases with 293 deaths. The following tables show the number of admissions and deaths at the hospitals of the Colony:—

COLONIAL WAR MEMORIAL HOSPITAL.

Year.	*Admissions.*	*Deaths.*	*Death-rate.*
1932	2,345	145	6·18
1933	2,509	161	6·41
1934	2,398	144	6·00
1935	2,713	162	6·00
1936	3,074	228	7·42

LAUTOKA HOSPITAL.

Year.	*Admissions.*	*Deaths.*	*Death-rate.*
1932	1,615	59	3·65
1933	1,860	81	4·3
1934	1,862	88	4·73
1935	2,335	97	4·11
1936	2,055	116	5·64

LEVUKA HOSPITAL.

Year.	*Admissions.*	*Deaths.*	*Death-rate.*
1932	241	12	4·98
1933	249	11	4·6
1934	269	10	3·72
1935	287	10	3·48
1936	304	30	9·87

LAMBASA HOSPITAL.

Year.	*Admissions.*	*Deaths.*	*Death-rate.*
1932	406	21	5·17
1933	501	29	5·78
1934	522	29	5·55
1935	647	25	3·86
1936	763	36	4·72

PROVINCIAL HOSPITALS

Year.	*Admissions.*	*Deaths.*	*Death-rate.*
1932	3,377	63	1·86
1933	2,885	155	5·37
1934	2,398	135	5·63
1935	2,597	158	6.08
1936	3,573	240	6·72

NATIVE MEDICAL PRACTITIONERS.

Year.	*Cases treated.*	*Deaths.*
1932	36,800	178
1933	36,975	183
1934	37,416	261
1935	37,358	257
1936	42,171	293

VII.—PRISONS AND ASYLUMS.

The sanitary conditions prevailing in the gaols of the Colony were maintained at their high standard.

The Suva Gaol is a model of what a gaol should be. It is kept scrupulously clean, and because of this is very free from outbreaks of infectious diseases.

The bakery at the Suva Gaol is staffed by prisoners and continues to make excellent bread. This bread is distributed amongst all public institutions in Suva.

The Visiting Medical Officer made routine visits to the Gaol three times weekly throughout the year. All new admissions were examined and cases requiring medical treatment were given the attention necessary. During the year 69 patients were admitted to the Gaol Infirmary, and 312 out-patients were treated for minor conditions. Of the diseases treated in the Infirmary there were 4 cases of dropsy, reported under the nomenclature of "gaol dropsy" a term that is somewhat ambiguous as these cases were not proved to be due definitely to dietetic deficiency.

An Indian Medical Practitioner is attached to the Gaol, and has his own quarters there. He has performed his duties satisfactorily during the year, and is gradually acquiring a wide experience in general practice.

The Public Lunatic Asylum.—The Principal, Central Medical School, is also the Medical Superintendent of the Public Lunatic Asylum. The Asylum staff consists of two European male attendants, a European female attendant and 15 Native attendants. The total number of patients treated during the year was 123, of which number 86 were patients remaining over from the previous year, while 37 were new admissions. During the year 28 patients were discharged unconditionally and 5 were allowed out on trial. There were 11 deaths and 79 patients remained at the end of 1936.

A troublesome outbreak of dysentery occurred early in the year. There were 2 cases of Shiga, 1 case of Flexner and 5 suspects. All cases were isolated, and recovered after receiving treatment. 46 patients were given a course of 8 injections of N.A.B., 11 of whom showed remarkable improvement under this injection treatment and were discharged during the middle of the year. 76 patients were given the usual anti-typhoid inoculations.

The patients attend to the institution gardens, which produce good supplies of vegetables and fruit.

VIII.—METEOROLOGICAL.

The total rainfall at Suva for 1936 was 129·93 inches, compared with an average of 119·70 inches over a period of 52 years. The wettest month was October, when 27·31 inches fell, and the driest month was August, when 3·03 inches were recorded. There were 236 wet days, the wettest being October 9th, when 9·15 inches fell.

IX.—SCIENTIFIC.

A paper by Dr. C. H. B. Thompson on the results obtained by anti-smallpox vaccination with dried calf lymph is attached to this report.

X.—GENERAL.

Drugs and Poisons Ordinance (Dangerous Drugs).

Permits to remove from the Opium Store were granted for the following amounts of Dangerous Drugs during 1936:—Tr. Opii Conc. (1–8), 5 pints; Tr. Opium B.P., 24 pints; Morphine Hydrochloride (Tablets and powder), 6 ozs.; Cocaine Hydrochloride, 1 lb; Nepenthe, 48 ounces; Tab. Dover Powder, 144 bottles of 100 tabs.; Ethyl Morphine Hydrochloride, 4 ozs.; Tr. Cannabis Indica, 16 pints; Chlorodyne, 18 ounces.

A. H. B. PEARCE,
Director of Medical Services.

APPENDIX A.

COLONIAL WAR MEMORIAL HOSPITAL.

RETURN SHOWING THE EXPENDITURE AND REVENUE IN EACH OF THE LAST TEN YEARS AND THE COST PER BED OCCUPIED

Year.	In-patients.	Daily average in hospital.	Expenditure	Cost per head per day. Personal Emoluments	Cost per head per day. Other Charges.	Cost per head per day. Total.	Patients fees received.	Fees, if paid, of patients treated gratuitously
			£ s. d.	d.	d.	d.	£ s. d.	£ s. d.
1927	2,180	81·51	10,192 14 2	38·2	44·0	82·2	1,452 7 7	3,389 0 0
1928	2,141	72·60	11,061 19 0	45·6	54·5	100·1	1,461 11 2	3,580 3 6
1929	2,464	80·3	11,029 0 0	42·3	48·0	90·3	1,534 11 5	3,097 15 0
1930	2,805	87·51	10,976 18 2	39·2	43·4	82·6	1,377 0 9	4,551 4 0
1931	2,303	87·04	10,690 19 1	43·8	36·9	80·5	1,628 6 5	3,278 0 0
1932	2,345	95·2	11,085 5 5	40·5	35·2	75·7	2,098 3 7	6,662 5 0
1933	2,509	104·83	11,382 19 6	38·4	33·1	71·5	2,067 5 3	5,497 18 10
1934	2,398	106·45	11,762 7 0	37·7	34·9	72·6	1,999 17 7	5,428 18 2
1935	2,713	118·07	12,237 16 10	31·92	36·22	68·14	2,245 4 4	5,421 1 0
1936	3,074	124·83	12,970 8 8	30·76	37·66	68·42	2,038 8 8	6,109 11 0

Remarks.—Salaries of the Medical Officers are included. The expenditure on the Central Medical School is not included. The cost of drugs used for out-patients is included. The expenditure under Works Department votes is not included.

LAUTOKA HOSPITAL.

RETURN OF EXPENDITURE FOR EACH OF THE PAST FIVE YEARS AND THE COST PER BED OCCUPIED.

Year.	Average daily number in hospital.	Expenditure.	Cost per head per day.		Total.
			Personal Emoluments	Other Charges.	
		£ s. d.	d.	d.	d.
1932	44·0	3,026 8 3	14·3	30·7	45·0
1933	48·0	3,245 8 8	14·2	30·2	44·4
1934	49·0	3,366 14 1	13·2	32·0	45·2
1935	49·83	3,419 17 0	15·95	29·18	45·13
1936	50·0	3,557 18 0	14·74	29·92	44·66

Remarks.—Does not include salaries of Medical Officers or of expenditure under Public Works Department. Cost of all drugs used is included.

LEVUKA HOSPITAL.

RETURN OF EXPENDITURE FOR EACH OF THE PAST FIVE YEARS AND THE COST PER BED OCCUPIED.

Year.	Average daily number in hospital.	Expenditure.	Cost per head per day.		Total
			Personal Emoluments	Other Charges.	
		£ s. d.	d.	d.	d.
1932	12·3	1,013 9 6	17·4	36·6	54·0
1933	13·0	1,012 6 5	16·3	34·9	51·2
1934	8·16	956 19 7	25·2	51·8	77·0
1935	11·11	982 2 6	19·62	38·61	58·23
1936	11·02	1,014 5 8	18·42	41·92	60·34

Remarks.—Does not include salaries of Medical Officers or expenditure under Public Works Department. Cost of all drugs used is included.

LAMBASA HOSPITAL.

RETURN OF EXPENDITURE FOR EACH OF THE PAST FOUR YEARS AND COST PER BED OCCUPIED.

Year.	Average daily number in hospital.	Expenditure.	Cost per head per day.		Total.
			Personal Emoluments.	Other Charges.	
		£ s. d.	d.	d.	d.
1933	22·5	1,408 8 8	11.8	29·3	41·1
1934	14·67	1,212 5 9	18·6	35.0	53·6
1935	20·05	1,485 8 7	13·91	34·81	48·72
1936	34·22	1,591 8 0	7·88	22·59	30·47

Remarks.—Does not include salaries of Medical Officers or expenditure under Public Works Department. Cost of all drugs used is included.

LUNATIC ASYLUM.

RETURN OF EXPENDITURE FOR EACH OF THE PAST FIVE YEARS AND COST PER PATIENT PER DIEM.

Year.	Average daily number in asylum.	Expenditure.	Cost per head per day.		Total
			Personal Emoluments	Other Charges.	
		£ s. d.	d.	d.	d.
1932	80·2	3,415 7 5	15·1	12·8	27·9
1933	81·0	3,183 4 11	12·6	13·2	25·8
1934	79.0	3,261 10 7	12·8	14·4	27·2
1935	77·0	3,462 1 6	14·87	14·7	29·57
1936	83·7	3,628 9 0	13·78	14·65	28·43

Remarks.—Expenditure under Public Works Department votes and Medical Officers salaries not included.

MAKONGAI CENTRAL LEPER HOSPITAL.

RETURN OF EXPENDITURE FOR EACH OF THE PAST FIVE YEARS AND THE COST PER PATIENT PER DIEM.

Year.	Average daily number in Hospital.	Expenditure.	Cost per head per day.		Total
			Personal Emoluments	Other Charges.	
		£ s. d.	d.	d.	d.
1932	471·89	12,659 17 5	6·5	11·3	17·9
1933	450·16	12,846 15 8	7·0	11·8	18·8
1934	448·25	13,292 18 10	7·06	12·44	19·5
1935	510·29	13,359 13 10	5·89	11·32	17·21
1936	571·35	14,072 11 8	5·45	10·67	16·12

Remarks.—Does not include expenditure under Public Works Department votes which was in 1935, £1,932 16s. 4d., on maintenance and £1,907 2s. 11d. on permanent improvements, and in 1936, £1,823 10s. 1d., on maintenance and £1,555 12s. 6d. on permanent improvements

RETURN SHOWING DAILY COST PER BED OCCUPIED DURING 1935 AND 1936 OF THE HOSPITALS AND ASYLUMS OF THE COLONY.

Hospital.	1935.		1936.	
	Aver. daily No. in Hosp.	Cost per head per day.	Aver. daily No. in Hosp.	Cost per head per day.
		s. d.		s. d.
Colonial War Mem. Hospital	118·07	5 8·14	124·83	5 8·42
Lautoka Hospital	49·83	3 9·13	50·00	3 8·66
Central Leper Hospital ..	510·29	1 5·21	571·35	1 4·12
Levuka Hospital	11·11	4 10·23	11·02	5 0·34
Lambasa Hospital	20·05	4 0·72	34·22	2 6·47
Public Lunatic Asylum ..	77·0	2 5·57	83·70	2 4·43
Penang Hospital	6·03	3 1·13	11·24	1 ·9
Nandi	14·20	2 0·8	11·90	2 0·3
Mba	16·84	0 9·38	15·02	1 1·58
Taveuni	11·8	2 3·79	20·40	1 8·49
Rewa	16·33	0 11·69	17·00	1 4·65
Kandavu	6·31	2 11·34	9·70	1 10·67
Nandronga	14·53	1 4·51	21·59	1 2·08
Ra	12·31	1 6·71	10·00	1 11·2
Mbua	14·34	1 0·33	16·75	1 0·77
Savusavu	13·65	1 4·11	13·94	1 7·87
Lau (Lomaloma)	5·89	3 7·97	14·10	1 11·97
Tholo East	15·4	0 8·7	15·15	1 5·48
Rotuma	6·31	3 5·2	6·80	3 3·12

APPENDIX B.

Value of Issues from the Government Pharmacy during 1936.

		£	s.	d.	£	s.	d.
1. Medical Department—							
A—Hospitals and Dispensaries—							
Mbau		57	4	8			
Mbengga		23	12	8			
Colonial War Memorial Hospital		2,705	11	2			
Ndavuilevu		60	5	4			
Ndrauniivi		16	7	0			
Ndreketi		36	8	10			
Ngau		17	4	8			
Kandavu		80	16	2			
Koro		26	10	9			
Korolevu i wai		25	15	10			
Korovou Tailevu		25	13	4			
Lambasa		621	17	6			
Lakemba		126	8	5			
Lautoka		890	2	2			
Lekutu		69	19	10			
Levuka		259	13	0			
Londoni		13	16	11			
Lomaloma		54	4	8			
Matuku		30	5	7			
Moala		27	15	2			
Momi		15	0	9			
Nambouwalu		70	0	0			
Nandarivatu		32	8	9			
Nandi		238	16	10			
Nandronga		199	15	6			
Nanduri		62	6	10			
Nailanga		104	3	2			
Nanduruloulou		10	3	5			
Nakasaleka		30	16	2			
Namarai		46	11	4			
Namata		17	11	3			
Namosi		16	19	5			
Nanukuloa		151	1	11			
Nanoko		1	7	4			
Nasau		5	10	4			
Natewa		24	13	3			
Natuatuacoko		27	1	0			
Nausori		2	2	11			
Navatusila		36	1	9			
Navua		49	7	3			
Nayavu		59	16	5			
Penang		137	4	9			
Nggaliyalatina		6	7	2			
Rewa		62	5	1			
Rotumah		104	18	8			
Savusavu		239	2	5			
Serua		63	4	4			
Taveuni		317	10	7			
Tavua		64	10	8			
Veitongo		27	7	3			
Viria		92	12	6			
Visonggo		27	13	3			
Vunindawa		165	19	9			
Wainibokasi		177	10	2			
Wainunu		49	15	2			
Yasawa		20	12	11			
Total Hospitals and Dispensaries		....			7,928	3	11
B—Native Obstetric Nurses		....			26	16	0
C—Public Institutions—							
Public Lunatic Asylum		324	4	6			
Central Leper Station		1,138	4	9			
Total Public Institutions		....			1,462	9	3

	£	s.	d.	£	s.	d.
D—Typhoid Immunization Campaign—						
Lambasa	135	2	6			
Lakemba	22	10	0			
Levuka	10	2	6			
Nandronga	2	5	0			
Navua and Serua	3	5	6			
N. W. Viti Levu	20	5	0			
Ra	2	5	0			
Rewa	54	1	0			
Suva	47	12	6			
Taveuni	11	5	0			
Total Typhoid Immunization ..	....			308	14	0
E—Other Medical	....			634	9	5
Total Medical Department ..	....			10,360	12	7
2. Provinces	....			1	10	10
3. Fijian Infant Welfare Scheme	....			476	0	8
4. Other Government Departments—						
Schools..	58	18	2			
Police	6	1	10			
Gaol Infirmary	54	17	1			
Other Government Departments ..	217	14	3			
Total Government Departments	....			337	11	4
5. Native Lands Commission Surveyors ..	....			1	3	1
6. Missions	....			55	19	8
7. Private Accounts	....			177	8	6
Total Issues from Government Pharmacy	....			£11,410	6	8

APPENDIX C.

Revenue, Medical Department.

	1935.			1936.		
Head IV—						
1. (i) Dairy Licences, Suva and Levuka ..	£38	12	0	£39	7	6
4. Drug Permits	13	15	0	13	5	0
Head V—						
22. Hospital Fees, Colonial War Memorial Hospital, Levuka, Lambasa & Lautoka Hospitals	3,374	18	7	3,565	11	5
24. Meat Inspection Fees	359	4	6	386	6	6
25. Central Leper Hospital Fees	3,096	11	4	6,067	8	2
26. Fees, Plantation Labourers, Lautoka and Lambasa Hospitals	1,000	0	0	1,000	0	0
27. Central Medical School	1,674	4	8	1,706	16	6
Head IX—						
2—(*a*) Makaluva and Nukulau Fees ..	70	4	0	87	18	0
(*b*) Sale of Government Drugs.. ..	139	18	7	159	18	5
(*c*) Fumigation and Disinfection Fees	129	8	10	168	1	3
(*d*) Sale of Stock	15	7	6	8	15	0
3. Sale of Produce, Makongai	198	12	2	251	6	9
4. Bakery Receipts Makongai	249	5	8	231	13	11
10. Ten per cent. Profits Makongai Canteen	14	0	4	13	11	6
Total	£10,374	3	2	£13,699	19	11

APPENDIX D.

Establishment.

The Medical Staff of the Colony as sanctioned for the year 1936 was:—

Administrative.—Director of Medical Services, 1; First Class Clerk, 1; Third Class Clerks, 2; Fourth Class Clerks, 3; Pharmacist, 1; Messenger, 1; Packers, 2.

Medical.—District Medical Officers, 12; Native Medical Practitioners, 61; Indian Medical Practitioners, 6; Native Obstetric Nurses, 55.

Colonial War Memorial Hospital.—Medical Superintendent, 1; Assistant Medical Superintendent, 1; Native Dispenser, 1; Matron, 1; Assistant Matron, 1; Nursing Sisters, 4; European Probationers, 13; Nurse-Housekeeper, 1; Native Obstetric Nurses, 2; Native Nursing Pupils, 20; Steward and Clerk, 1; Servants, 25; Fourth Class Clerk, 1; X-ray Technician, 1; Hall Porter, 1; Seamstress, 1.

Levuka Hospital.—Nurse in Charge, 1; Native Dispenser, 1; Nurses (native), 2; Servants, 4.

Lunatic Asylum.—Head Attendant, 1; Assistant Attendant, 1; Female Resident Attendant, 1; Native Attendants, 9 male, 6 female; Servants, 2.

Central Leper Hospital.—Medical Superintendent, 1; Clerk, 1; European Nursing Sisters, 15; Native Sisters, 10; Overseer, 1; Native Constables, 3; Servants, 19; Leper Patients employed as Servants, Headmen or School Teachers, 12; Bakers, 4.

Lambasa Hospital.—Nurse in Charge, 1; Native Medical Practioner, 1; Native Nurses, 2; Servants, 5.

Lautoka Hospital.—Native Medical Practitioner, 1; Matron, 1; Nursing Sisters, 3; Dresser, 1; Native Nurses, 7; Servants, 10.

Pathological Division.—Pathologist, 1; Technician, 1; Native Attendants, 3.

Sanitary—(1) General.—Medical Officer of Health, Suva, 1; European Sanitary Inspectors, 5; Fijian Sanitary Inspector, 1; Indian Sanitary Inspectors, 2; Police Officers who are also Sanitary Inspectors, 6; European Caretaker, Quarantine Station, 1; Indian Caretaker, Quarantine Station, 1.

(2) *Ankylostomiasis Campaign.*—Indian Sanitary Inspectors, 5.

Medical Staff Postings.

The Medical Staff postings on 31st December, 1936, were:—

A. H. B. Pearce, L.R.C.P. & S. (Edin.), L.F.P.S. (Glasgow); D.P.H. (Dublin), F.R.San.I., Director of Medical Services, on sick leave.
V. W. T. McGusty, M.B., Ch.B. (Dublin), Acting Director of Medical Services.
P. Harper, M.D. (Dunelm), M.R.C.S., L.R.C.P., District Medical Officer, on leave.
C. H. B. Thompson, M.R.C.S., L.R.C.P., D.P.H. (St. Andrews), D.T.M. (Liverpool), Medical Officer of Health, on leave.
W. M. Ramsay, L.R.C.P. & S. (Edin), L.F.P.S. (Glasgow), District Medical Officer, Rewa.
A. J. Borg, M.D. (Malta), District Medical Officer, Mba.
H. S. Evans, M.R.C.S., L.R.C.P., District Medical Officer, on leave.
T. Clunie, M.B., Ch.B. (Aberdeen), Medical Superintendent, Colonial War Memorial Hospital.
M. L. McCauley, M.B., Ch.B., B.A.O. (Dublin), District Medical Officer, Lambasa.
R. J. Snodgrass, L.R.C.P. (Edin.), L.R.C.S., L.D.S., R.C.S.E., District Medical Officer, Lautoka.
C. J. Austin, M.B., Ch.B. (Edin.), Medical Superintendent, Makongai Leper Asylum.
W. G. MacNaughton, M.B., Ch.B. (Glasgow), District Medical Officer, Ra.
G. T. Barnes, M.B., Ch.B. (Birmingham), D.T.M. & H. (Eng.), District Medical Officer, Nandronga.
W. Foskett, M.C., M.D. (Dunelm), B.S., District Medical Officer, on leave.
W. Worger, M.R.C.S. (London), L.R.C.P. (England), District Medical Officer, Taveuni.
F. Widlake, L.M.S.S.A. (London), Assistant Medical Superintendent, Colonial War Memorial Hospital.
D. C.M. Macpherson, M.B., Ch.B. (Glasgow), D.T.M. (Liverpool), C.P.H. (Johns Hopkins), Pathologist; also acting as Medical Officer of Health, Suva.
D. W. Hoodless, B.Sc. (Lon.), L.M.S.S.A., Principal, Central Medical School.
R. W. D. Maxwell, M.B., Ch.B. (N.Z.), District Medical Officer, Levuka.
J. S. Cramer, M.B., Ch.B., F.R.F.P. & S. (Glasgow), L.R.C.P. & S. (Edin.) District Medical Officer, Savu Savu.

Leave.—Dr. A. H. B. Pearce, 18th December to 31st December; Dr. M. L. McCauley, 1st January to 6th February; Dr. F. Widlake, 1st January to 27th January; Dr. W. Worger, 1st January to 9th January; C. Kendrick 1st January to 9th January; Miss M. Carew, 1st January to 31st December; Miss J. Sinclair, 14th January to 31st December; Dr. H. S. Evans, 18th February to 31st December; Miss A. B. Montgomery 10th March to 23rd July; Dr. P. T. Harper, 30th May to 31st December; Dr. W. Foskett, 25th June to 31st December; Dr. C. H. B. Thompson, 1st September to 31st December; Rev. Sister Mary Berchmans, 24th September to 31st December; Rev. Sister Mary Beninga, 24th September to 31st December; Ramroop, 1st November to 31st December.

REPORT BY Dr. D. C. M. MACPHERSON, ACTING MEDICAL OFFICER OF HEALTH AND PORT HEALTH OFFICER, SUVA, FOR THE YEAR 1936.

General.—Bacillary dysentery, chiefly of the Shiga variety, has been prevalent during the year, principally in the north-west districts of Viti Levu and Rewa districts. For the first two quarters of the year 400 and 492 cases were notified, and for the last two quarters 337 and 516 (41 amœbic for the year).

Measles.—This disease has been prevalent during the year, especially in the second and third quarters. The Fijians were most affected with 2,884 cases for the year. The disease was generally of mild type, but a number of cases developed respiratory complications.

Meteorological.—The total rainfall for the year was 129·93 inches, as against 163·62 inches for 1935, the average rainfall for the last 53 years being 119·70 inches. The total number of days on which rain fell was 236.

Staff Movements and Appointments.—

Dr. Thompson, Medical Officer of Health, proceeded on eight months leave on 1st September.

Dr. D. C. M. Macpherson assumed duty as Acting Medical Officer of Health on 1st September.

Mr. H. E. Ellis, Meat and Sanitary Inspector resigned on the 28th February.

Mr. W. A. Milne, Sanitary and Meat Inspector, Central Board of Health, assumed duty 3rd July.

Mrs. D. St. G. Ryder was transferred to the central office of the Medical Department from the Health Office on 20th October, and Miss M. C. Harcourt transferred from the Supreme Court to the Health Office on the same date.

Ram Roop, Indian Sanitary Inspector, was granted two months vacation leave from 1st November.

Port of Suva.

Infectious diseases in or in the vicinity of ports in communication with Fiji:—

Disease.	*Ports or countries.*	*Quarters of the year.*
Chicken-pox	Los Angeles	1, 3
	San Francisco	1, 2, 3, 4
	Vancouver, Victoria B.C.	1, 2, 3, 4
	Honolulu	1, 2, 3, 4
Cholera	Calcutta	1, 2, 3, 4
Influenza	Los Angeles	1, 2, 3, 4
	San Francisco	1, 2, 3
	Honolulu	2
	Samoa	2
	Solomon Islands	2
Diphtheria	Sydney and Melbourne	3
Poliomyelitis	Los Angeles	1, 2, 3, 4
	San Francisco	2, 3, 4
	New Zealand	4
Typhoid	Pago Pago	2
Plague (human and rodent)	Colombo	1, 2, 3, 4
	Java	1, 2
	Hawaii Islands	1, 2, 3, 4
	Maui Island	4
Small-pox	Calcutta	1, 2, 3, 4
	Colombo	1
	Shanghai	1, 2
	San Francisco	1
	Los Angeles	1, 4
	Seattle	1, 2
*Weil's disease	North Queensland	2, 3

* One case of Weil's disease reported 21 miles from Cairns, North Queensland, in the second quarter; 43 cases reported in North Queensland for third quarter.

Vessels granted pratique, 147 (British, 99; foreign, 48); registered tonnage, 796,058 tons

Vessels refused pratique, nil.

Vessels granted provisional pratique, nil.

Vessels fumigated, 92 (overseas, 14; Fijian, 78).

Vessels from plague infected or suspected ports, 1.

Vessels searched for mosquitoes, 24 (inside harbour, 17; outside harbour, 7).

Vessels placed in quarantine, 1—(H.M.S. " Leith " as vessel was proceeding to the Western Pacific High Commission Territories and measles was prevalent in Suva.)

Vessels searched for rats; overseas, 15.

Medical inspections.—	1936.	1935.
Passengers	3,785 (landing, 3,421; through, 364.)	3,957 (landing, 3,197; through, 760.)
Crews	2,662	2,496
Labour	Nil.	5
Total	6,447	6,458

Persons placed in quarantine upon arrival from overseas, 578 (Indians).
Persons landed under surveillance or subject to undergoing treatment, 12.
Persons refused permission to land, nil.
Crew not allowed to land, 7.
Articles disinfected at Disinfection Station, 264.
Articles disinfected at Disinfection Station, Nukulau, 3,200.

Quarantine of Passengers ex s.s. "Ganges."—The s.s. "Ganges" arrived from Calcutta on 19th December with 578 passengers. The passengers, after medical inspection, were transferred to Nukulau Quarantine Island. One youth died on board on the 18th day of voyage from heart failure following dysentery. No sickness occurred, and quarantine was lifted on 23rd December.

Preventive health measures taken prior to or during voyage included:—

(*a*) crew—vaccinated against small-pox and cholera in Calcutta by ship's surgeon;
(*b*) passengers—at Calcutta all passengers vaccinated against small-pox and certified free from trachoma.

On voyage inoculated against typhoid and cholera, and given hookworm treatment.

Medical Inspection by Quarantine Officer, Suva:—

(*a*) crew inspected and found healthy;
(*b*) 2 adult male Indians—eye trouble;
1 adult female Indian—suffering from boils;
1 adult female Indian—scabies;
2 adult female Indians—exhaustion following child-birth.

Health of passengers generally good. Baggage of approximately 25 per cent. of the passengers (chiefly Punjabis) was found to be dirty or verminous and was disinfected by wet steam.

Infectious Diseases.

(See Tables I, II and III appended).

Diphtheria.—Twenty-one cases notified for the Colony—12 from Suva, from which K.L.B. was isolated in more or less pure culture.

Dysentery.—As mentioned above, dysentery, chiefly of the Shiga variety, was prevalent in some of the Viti Levu districts (see Table I). For the first half of the year the monthly incidence varied from 36, steadily increasing to 186, then dropping to 114, with a total of 892 (21 amœbic) for the six months. For the second half of the year the monthly incidence gradually increased from 78 to 210 with a total of 853 (20 amœbic). With the advent of July, the coolest month, the number of cases diminished considerably.

From Suva—urban and rural—district 98 cases (5 amœbic), with three deaths, were reported, giving a mortality rate of 3·06 per cent. as compared with 8 per cent. for the Colony, and it is perhaps explainable by the tendency of more severe cases to gravitate towards Suva and its hospital. From specimens submitted to the Bacteriological Laboratory the following results were obtained:—Shiga, 34; Schmitz, 12; Flexner, 22; Sonne, 5; Negative, 12;

Deaths reported from Bacillary dysentery are as follows:—

District.	*Deaths.*	*Total cases.*	*Mortality.*
Suva	3	93	3·2 per cent.
Mba and Tavua	1	115	0·8 ,,
Tholo East	22	159	13·8 ,,
Lau	2	52	3·8 ,,
Lautoka	1	94	1·06 ,,
Lomaiviti	2	80	2·5 ,,
Nandi	21	233	9·01 ,,
Nandronga	20	208	0·9 ,,
Navua	4	80	5·0 ,,
Ra	20	127	3·1 ,,
Rewa	44	396	11·1 ,,
	140	1,637	..

Enteric Fever.—One hundred and eighty-eight cases of typhoid fever were reported in the Colony, being an increase of 79 cases over the 1935 figures. Rewa district accounts for 38 cases, and it is believed that the provision of an adequate and purified piped water supply would lead to a substantial decrease in the incidence of the disease in this area. From Suva district there were 11 urban and 27 rural cases, mostly from the Flagstaff and Toorak areas. All contacts were inoculated immediately cases were notified. The extension of the Suva water supply through parts of the Flagstaff area is very desirable owing to the large number of polluted soapstone excavations which at present constitute the main source of water supply on Indian allotments in that locality.

Dropsy (Epidemic).—One case was notified, that of an Indian in Mba, in the third quarter of the year.

Influenza.—The figures for 1936 show an increase of 941 on those of the previous year. The disease was of mild type.

Infectious Disease Inquiries and Examinations made by Medical Officer of Health and, or, Health Office Staff in Suva district:—

Visits re pulmonary tuberculosis	8
Visits re other infectious diseases	420
Examination of discharged lepers	17
Examination of contacts of lepers	95
Examination of suspected lepers	18

Vaccination and Inoculation.—T.A.B. inoculations, 1,432; vaccinations against small-pox, 508.

In the 1935 annual report Dr. C. H. B. Thompson stated he would submit a report on the results obtained by vaccination with the dried calf lymph kindly supplied by the Pasteur Institute, Java. This report is now included under the scientific section, and the results obtained are both interesting and encouraging.

Child Welfare.

One morning in each week has been devoted to visits to various Welfare Centres, the supervision of the Committee's activities, and to inspection of the native houses, latrines and water supplies of villages in the Suva area.

Area.	*No. visits.*	*Area.*	*No. visits.*
Nasese	.. 48	Langgere	.. ..
Rewa Street ..	.. 32	Tamavua River	.. 39
Flagstaff	.. 40	Kalekana ..	.. 22
Asylum Road ..	.. 19		
		Total	.. 200

Note.—The figures are considerably below those of last year, as the Native Welfare Nurse was absent on leave.

Anti-mosquito Work.

All unoccupied Crown Lands in Suva district have been regularly cleared of bush, &c., drains maintained, and all deposits of empty tins, bottles, &c., collected and buried. Pools of stagnant water, &c., wherever existing, have been oiled to prevent mosquito breeding.

Suva Rural Area.

House-to-house inspection has been steadily maintained in this area, and 2,890 inspections and 2,058 re-inspections have been made.

Sanitation, Suva Point.

The sanitation at Suva Point Settlement has been greatly improved by the employment of one whole-time man in clearing drains and outlets and collecting rubbish, &c.

Legal Prosecutions.

Failure to comply with notice to provide water supply to buildings	3
Selling adulterated milk	4
Selling adulterated mustard oil	1
Selling milk from unregistered premises	1
Permitting untested cattle to remain in dairy herd	1

Total fines imposed, £31.

Gazette Notices.

Appointments under Public Health Ordinance (42/36).—

All Medical Officers in Government Service to be Medical Officers of Health.
C. Kendrick to be Chief Sanitary Inspector and Meat Inspector, Central Board of Health.
W. C. Cockell to be a Senior Sanitary Inspector and Meat Inspector and Secretary to Central Board of Health.
All other Sanitary Inspectors in the Service of the Fiji Government to be Sanitary Inspectors of the Central Board of Health.

Notices (28/36).—

Silicosis added to Class B of Infectious Diseases in Schedule A of Public Health Ordinance.
Rural Sanitary Districts fixed and defined by Central Board of Health.

By-laws (38/36).—

Garbage Disposal By-laws—Suva Urban Sanitary District.
Animals—By-laws Suva Urban Sanitary District.

Proclamations.—

Lautoka Township proclaimed.

TABLE I.—INFECTIOUS DISEASES—NOTIFICATIONS BY DISTRICTS.—1936.

Disease.	Suva Urban.	Suva Rural.	Mba and Tavua.	Mbua.	Tholo East.	Tholo North.	Kandavu.	Lau.	Lautoka.	Lomaiviti.	Mathuata.	Nandi.	Nand-ronga.	Navua.	Ra.	Rewa.	Rotuma.	Savusavu.	Taveuni.	Totals 1936.	Totals 1935.	1936 compared with 1935.
Ankylostomiasis	28	21	9	..	17	3	2	6	14	53	84	20	41	3	5	46	4	8	7	371	409	−38
Broncho-pneumonia ..	12	9	35	3	1	1	2	..	17	7	2	29	13	2	2	51	..	..	3	189	83	+106
Lobar-pneumonia	2	1	18	..	5	..	..	1	8	9	..	5	1	..	5	4	..	..	1	60	..	+60
Chicken-pox	..	1	4	..	..	..	..	..	..	1	..	..	..	1	..	2	..	..	..	9	34	−25
Conjunctivitis	..	..	..	..	..	20	..	6	..	2	1	..	..	..	2	..	..	..	..	31	..	+31
Diphtheria	6	6	..	2	..	..	..	..	2	..	..	..	..	..	..	4	..	1	..	21	24	−3
Dysentery	42	56	117	..	162	13	..	52	101	80	39	244	211	80	128	397	..	3	20	1,745*	917	+828
Epidemic dropsy	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	15	−14
Enteric	11	27	32	..	1	..	2	1	5	11	9	7	13	1	2	38	..	7	21	188	109	+79
Influenza	16	7	87	159	54	13	..	107	25	68	63	140	50	130	58	228	146	7	..	1,358	517	+841
Leprosy	1	5	4	..	..	..	3	1	5	1	..	3	5	1	2	8	3	3	..	45	60	−15
Measles	249	157	85	147	145	61	16	174	146	362	170	89	479	218	99	477	..	201	53	3,328	..	+3328
Puerperal fever	1	2	1	1	..	..	..	..	..	..	..	6	..	..	..	4	..	..	1	16	7	+9
Ringworm	19	4	..	..	11	..	..	..	..	19	12	2	..	..	52	25	..	1	..	145	..	+145
Scabies	34	23	15	18	64	26	13	24	87	186	179	39	152	89	78	157	504	26	22	1,736	1,529	+207
Trachoma	..	..	5	..	9	11	3	2	7	7	35	19	21	4	9	3	2	..	1	138	164	−26
Tuberculosis pulmonary ..	15	14	21	2	1	8	2	3	22	19	12	14	35	8	23	35	14	4	3	255	216	+39
Tuberculosis other ..	..	..	1	..	..	..	2	..	5	..	..	3	5	3	1	4	1	..	..	25	22	+3
Venereal disease	32	17	30	..	3	..	..	1	25	6	152	36	19	1	9	10	..	4	7	352	120	+232
Whooping cough	11	10	..	..	14	..	..	..	..	..	..	..	..	..	..	12	..	1	..	48	..	+48
Yaws	3	..	11	377	107	25	20	6	28	107	373	58	357	32	154	188	1,059	200	93	3,198	2,612	+586
Totals ..	482	360	476	709	594	181	65	384	497	938	1,131	714	1,402	573	629	1,693	1,733	466	232	13,259	6,838	+6421

* 1,704 Bacillary, 41 Amoebic.

TABLE II.—INFECTIOUS DISEASES NOTIFICATIONS (CASES) BY NATIONALITIES.—1936.

Disease.	Europeans	Half-castes.	Fijians.	Rotumans.	Indians.	Chinese.	Others.	Totals.
Ankylostomiasis ..	5	12	147	4	199	3	1	371
Broncho-pneumonia ..	1	5	109	1	73	..	..	189
Lobar-pneumonia ..	1	..	44	..	15	..	..	60
Chicken-pox	..	..	7	..	2	..	..	9
Conjunctivitis	..	..	29	..	2	..	..	31
Diphtheria	12	..	..	..	9	..	..	21
Dysentery	31	23	1,209	1	469	4	8	1,745
Enteric fever	8	7	87	1	84	1	..	188
Influenza	12	16	931	86	308	..	5	1,358
Leprosy	..	..	17	3	22	..	3	45
Measles	116	46	2,884	..	241	7	34	3,328
Puerperal fever	..	..	6	..	10	..	..	16
Ringworm	3	..	106	..	35	..	1	145
Scabies	1	9	1,092	504	122	..	8	1,736
Trachoma	..	3	99	2	34	..	..	138
Tuberculosis, pulmonary	3	5	138	13	86	2	8	255
Tuberculosis, other ..	..	..	20	1	4	..	..	25
Venereal disease.. ..	17	12	44	..	277	2	..	352
Whooping cough ..	14	3	25	..	5	..	1	48
Yaws	..	1	2,123	1,059	12	2	1	3,198
Epidemic dropsy ..	..	..	..	..	1	..	..	1
Totals ..	224	142	9,117	1,675	1,010	21	70	13,259

TABLES III.—INFECTIOUS DISEASES—MONTHLY INCIDENCE (CASES).—1936.

Disease.	Area.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Totals.
Ankylostomiasis	A	1	2	1	1	3	2	2	1	..	3	8	2	26
	B	..	..	1	2	3	1	1	1	..	1	8	2	20
	C	30	40	9	26	24	12	18	48	30	19	31	38	325— 371
Broncho-pneumonia.	A	..	..	1	5	1	2	3	..	..	..	..	..	12
	B	..	1	1	5	1	..	..	..	1	..	..	..	9
	C	2	4	7	9	18	21	32	26	20	14	8	7	168— 189
Lobar-pneumonia	A	..	..	..	..	..	..	2	..	..	..	..	..	2
	B	..	..	..	..	..	..	..	..	1	..	..	..	1
	C	..	..	..	..	..	..	16	13	13	8	2	5	57— 60
Chicken-pox ..	A	..	..	..	..	..	..	..	..	..	..	..	..	..
	B	1	..	..	..	..	..	..	..	..	..	..	..	1
	C	1	..	1	..	..	..	..	2	..	..	2	2	8— 9
Conjunctivitis ..	A	..	..	..	..	..	..	..	..	..	..	..	..	..
	B	..	..	..	..	..	..	..	..	..	..	..	..	..
	C	..	..	..	18	..	..	2	6	..	..	3	2	31— 31
Diphtheria ..	A	1	..	..	..	..	2	2	..	..	..	1	..	6
	B	1	..	..	..	1	2	2	..	..	..	..	..	6
	C	1	..	1	2	..	4	..	..	..	1	..	..	9— 21
Dysentery ..	A	5	1	8	6	7	..	2	1	4	1	2	5	42
	B	2	2	28	4	6	3	2	..	..	2	4	3	56
	C	35	138	181	179	172	115	75	129	124	195	98	206	1,647— 1,745
Epidemic dropsy	A	..	..	..	..	..	..	..	..	..	..	..	..	..
	B	..	..	..	..	..	..	..	..	..	..	..	..	..
	C	..	..	..	..	..	..	..	..	1	..	..	..	1— 1
Enteric	A	1	..	..	..	2	7	..	..	..	1	..	..	11
	B	1	1	..	..	7	10	3	..	..	3	..	2	27
	C	19	10	30	12	10	16	5	17	2	9	3	17	150— 188
Influenza ..	A	..	1	..	9	..	..	..	..	..	6	..	..	16
	B	..	2	..	5	..	..	..	..	..	..	..	..	7
	C	168	24	34	137	155	203	194	54	68	138	75	85	1,335— 1,358
Leprosy	A	..	..	..	..	..	..	..	1	..	..	..	..	1
	B	..	..	..	1	1	1	..	2	..	..	..	..	5
	C	5	..	5	7	5	1	1	5	2	4	2	2	39— 45
Measles	A	10	7	46	115	62	6	3	..	..	..	..	..	249
	B	6	13	46	59	30	3	..	..	..	..	..	..	157
	C	62	117	23	313	459	283	537	616	233	229	25	25	2,922— 3,328
Puerperal fever ..	A	..	..	1	..	..	..	..	..	..	..	..	..	1
	B	..	..	1	..	..	1	..	..	..	..	..	..	2
	C	1	1	..	3	1	1	3	..	..	2	..	1	13— 16
Ringworm ..	A	..	7	1	..	2	6	2	..	..	1	..	..	19
	B	..	1	..	..	3	..	..	..	..	..	..	..	4
	C	9	9	3	9	11	12	13	9	12	25	6	4	122— 145
Scabies	A	..	3	2	..	10	8	4	1	..	6	..	..	34
	B	2	1	1	..	8	10	..	..	1	..	..	..	23
	C	207	166	86	105	155	122	152	172	162	133	160	59	1,679— 1,736
Trachoma ..	A	..	..	..	..	..	..	..	..	..	..	..	..	..
	B	..	..	..	..	..	..	..	..	..	..	..	..	..
	C	17	10	10	10	22	12	11	14	9	9	8	6	138— 138
Tuberculosis pulmonary.	A	5	2	1	1	2	1	1	1	1	2	..	..	17
	B	3	1	3	..	1	2	2	..	..	..	..	..	12
	C	17	10	14	32	25	20	21	14	19	14	21	19	226— 255
Tuberculosis, other.	A	..	..	..	..	..	..	..	..	..	..	..	..	..
	B	..	..	..	..	..	..	..	..	..	..	..	..	..
	C	1	2	1	4	4	3	..	..	1	3	2	4	25— 25
Venereal disease..	A	..	3	1	1	4	8	1	2	4	2	3	4	33
	B	1	2	2	2	..	4	4	..	..	8	10	5	38
	C	17	25	10	15	22	12	27	40	54	10	22	27	281— 352
Whooping cough	A	..	1	3	5	2	..	..	..	..	..	..	..	11
	B	..	..	1	4	2	2	..	..	..	1	..	..	10
	C	3	..	1	..	8	1	..	..	..	1	13	..	27— 48
Yaws	A	..	..	..	..	3	..	..	..	..	..	..	..	3
	B	..	..	..	..	..	..	..	..	..	..	..	1	1
	C	283	350	242	385	319	198	317	393	181	214	239	73	3,194— 3,198
Totals ..		918	957	807	1,491	1,571	1,117	1,460	1,568	943	1,065	756	606	13,259

A—Suva Urban District. B—Suva Rural Districts. C—Country District.

REPORT BY Dr. T. CLUNIE, MEDICAL SUPERINTENDENT, COLONIAL WAR MEMORIAL HOSPITAL.

The Hospital is a ferro-concrete two-storeyed building, with a partial third storey consisting of kitchen and annexes, on a commanding site overlooking Suva harbour.

Beds and cots.—Beds, 142; cots, 31; beds in Lazarette, 8.

Staff.—The Director of Medical Services, the Honourable A. H. B. Pearce, is consulting Medical Officer to the Hospital. The Medical Superintendent is also Physician and Surgeon. The Assistant Medical Superintendent is Officer in Charge of the Out-patient Department, is Radiologist, and has charge of a Native Medical Ward. Dr. C. H. B. Thompson is Consulting Ophthalmic Surgeon and Dr. D. C. M. Macpherson is Pathologist. The Dispenser who is a graduate of the Central Medical School, Suva, is also Anæsthetist. This office was ably filled by Native Medical Practitioner Filikesa Ramaqa. Indian Medical Practitioner James Jhinku, a graduate of the same School, was Assistant Medical Officer in the Out-patient Department.

Nursing Staff.—This consists of the Matron, Assistant Matron, four graduate Staff Nurses and one Native Obstetric Staff Nurse. There are 13 European Probationers who are trained for a qualification under New Zealand registration, and 20 Native Obstetric Nurse pupils who are trained for a local qualification.

Post Graduate Nursing Courses.—Sister Carew returned to duty on December 10th, following sixteen months vacation leave, during which period she obtained Obstetric and Child Welfare Certificates in London.

Sister Sinclair also proceeded on vacation leave to take up Post-Graduate study in Glasgow, Scotland.

Nursing Education.—Miss Tennant, Assistant Director of the Nursing Division of the Rockefeller Foundation, visited the Hospital in connection with the training of Native Obstetric and Native General Nurses. While in Suva, Miss Tennant delivered a lecture on the Training of Nurses in relation to Public Health, to the Fiji Branch of the British Medical Association.

Miss Lambie, Director of the Division of Nursing, through the courtesy of Dr. Watt, Director-General of Health, New Zealand, inspected the Hospital and reviewed the question of the training of European nurses. Whilst in Suva Miss Lambie acted as examiner of four hospital candidates in the practical section of the New Zealand State Examination for Nurses. The hospital is fortunate in being able to secure the advice on nursing questions of so practical and able an administrator as Miss Lambie.

Office Staff.—The European Clerk and Steward is assisted by a Native clerk who is also telephone switchboard operator.

Medical Students.—The third- and fourth-year students of the Central Native Medical School act as dressers and male nurses in the wards. In addition they take periods of training in the Dispensary, Eye Department, Out-patient Department and Post-mortem theatre. Their training is essentially practical.

Post-Graduate Courses.—Native Medical Practitioners who have been over five years in practice, or specially selected practitioners, may take these courses, which extend over six months or longer, and during which the graduates act as House Surgeons, House Physicians, and Casualty Officers. They also attend lectures and clinics at the Medical School and Hospital.

These refresher courses are of value in maintaining a high standard of efficiency in the Native Medical Practitioner services.

Further information concerning these courses will be found in the Report of the Director of Clinical Studies.

Co-operation between School and Hospital.—The Medical Superintendent is responsible for the direction of Clinical Studies.

Anæsthetics.—The dispenser carried out the duties of Hospital Anæsthetist. Dr. I. H. Beattie continued his keen interest in the theoretical and practical training of medical students. Dr. D. C. M. Macpherson and Dr. F. Widlake also took an active part in this training.

The following is the list of anæsthetics used:—

General (chloroform and ether and ethyl chloride and ether	462
Local	209
Spinal	50
Evipan	75
Rectal	20
Total ..	816

Injections.—N.A.B. 35; others, 168.

X-Ray Department.—The X-ray plant, so generously donated by Sir Henry Marks, continues to be of great assistance in the diagnosis of difficult or obscure cases. The present X-ray Room is much too small and the Developing Room is not satisfactory. It is hoped that this Department will be extended and reorganised in the near future, by the building of a modern operation theatre block, so permitting the extension of the X-ray Department. No facilities exist for X-ray therapy. I attach the report of the Radiologist.

Diathermy and Radium.—Schell medical and surgical diathermy machines were installed during the year. Medical diathermy was used for arthritis, certain gynæcological conditions, prostatitis, myositis and fibrositis, &c., and was particularly successful in the treatment of a severe case of double pneumonia in a medical student.

Surgical diathermy was used in cases of fungating caricinomatous neoplasms of the cervix uteri, excision of melanomata and other superficial growths, destruction of septic tonsils in cases considered unsuitable for dissection or guillotine methods, destruction of nævi, &c.

Sodium Evipan was found to be a convenient and safe anæsthetic for use during diathermy procedures.

The Director of Medical Services was able to arrange for the loan of a small supply of Radium, through the courtesy of the Director-General of Health and Medical Services of the Commonwealth of Australia. Success was achieved particularly in the treatment of malignant skin conditions in several cases. No gynæcological radium was available, but with the small supply of radium available, combined in some cases with diathermy, good results were obtained in advanced inoperable cases of carcinoma of the cervix uteri.

One case of carcinoma of the tongue in a Fijian was treated by radium. The growth became perceptibly smaller and ulceration was diminished, but the patient absconded before a block dissection of glands could be carried out.

Beneficial results were obtained in a case of persistent keloid formation.

There is a large field for diathermy and radium in the Colony, and cases will continue to come for treatment as beneficial results become apparent.

Regulations for the handling and care of radium in the Hospital were drawn up.

Pathological and Bacteriological Laboratories.—The construction and equipment of the new laboratories was completed during the year. These laboratories, which are equipped for modern work and teaching, are under the direction of Dr. D. C. M. Macpherson, Government Pathologist. It is hoped that during 1937 the Students and Graduates of the Central Native Medical School will be able to take full advantage of the facilities provided for the study of bacteriology and pathology.

Clinical Photographs.—A clinical camera was provided for the Hospital during the year, and I am indebted to Mr. Pery-Johnston, of the Pathological and Bacteriological Laboratory staff, for the excellent clinical photographs secured for the instruction of students and for case records. Many more photographs of interesting clinical conditions could have been taken but the supply of films was not available.

Routine Examinations.—Routine hospital stool examinations were carried out by the Laboratory. Apart from the importance of treatment of such cases, this routine should in time provide a useful incidence map for the use of health authorities. The total number of specimens examined was 1,531.

Parasites and Ova.—

	Per cent. infected.	
	1935.	1936.
Hookworm	20·7	23·7
Ascaris	5	5·6
Trichuris	7·2	6·5
Oxyuris	2·5	2·8
Trichostrongylus	1·1	0·6
Hym. nana	0·1	..

Ante-natal Clinic.—The year has shown an appreciable increase in attendances. The following number attended:—Indians, 40; Fijians, 15; Others, 10. Total number of patients, 65. Total number of visits, 168.

The increase is largely due to the keenness and hard work of Sisters Retemeyer and Cleary, under the direction of the Matron, combined with the outside work done by Health Workers, under the directions of the Secretaries of Native and Indian Affairs, and the growing appreciation of the importance of this Clinic by Native Medical Practitioners, who have taken Post-graduate courses.

Obstetric Ward.—This cramped Ward had a busy and successful year; 230 births were recorded. Among this number were nine breech presentations, and two face presentations. There were two sets of twins. The mothers by race were:—Indian, 100; Fijian, 91; Others, 37.

Twenty cases required perineal suture, one craniotomy and one decapitation had to be carried out—both cases admitted in advanced labour and with marked pelvic contraction—an argument in favour of the ante-natal clinic.

There were six cases of asphyxia livida, and 11 of asphyxia pallida, all of whom recovered, with the exception of two premature infants.

Ten babies were still-born, one of which was an amencephelic associated with hydramnios. Two babies died almost immediately after birth, and two died a few days following birth, owing to prematurity. Two babies were still-born in cases of placenta prævia.

There were six cases of post-partum hæmorrhage, one being severe, three moderately severe cases of ante-partum hæmorrhage and two cases of retained placenta (both removed manually).

The usual training of Native Obstetric Nurses was carried out and seven Native Nurse probationers qualified, the Director of Medical Services, the Medical Superintendent and the Matron acting as examiners.

The success of this Ward during the year is largely due to the excellent work of Sister Retemeyer and other doubly-certificated Sisters.

The available staff does not allow of a whole-time Obstetric Sister. The Obstetric Sister takes duty in surgical and medical wards, and is relieved by other Sisters, whose main tour of duty is in medical and surgical wards. The fact that no cross-infection has occurred may be attributed largely to the care and high standard of obstetrical technique of the Sisters concerned.

Out-Patients.—The attendance of the Out-patient Department for the last three years are as follows:—

	1934.	1935.	1936.
European	1,220	1,609	1,758
Fijian	6,071	6,720	7,057
Indian	9,697	4,927	6,995
Others	2,947	1,305	1,520
	19,935	14,561	17,330

Falling off on the number of Indian attendances is attributed to the new regulations whereby all Indians except paupers are required to pay a sum of 1s. for medicine.

In-Patients.—	1934.	1935.	1936.
European	373	425	448
Fijian	693	834	935
Indian	984	1,058	1,227
Others	349	396	464
	2,399	2,713	3,074

Diseases.—A list of the diseases treated is attached.

Surgical Procedures.—Surgical procedures in the operating theatre, out-patients theatre and wards totalled 2,540. A list of operations is attached.

Medical and Surgical Wards.—Work in these wards was very heavy as, apart from the usual illnesses, there were epidemics of measles, mumps, and bacillary dysentery, to contend with. A good deal of overcrowding was unavoidable, as no isolation ward was available. A temporary isolation ward was secured, by the conversion of the new laboratories under construction, to deal with an epidemic of dysentery in a road gang of 300 men on the Suva–Navua Road, but was not required as the epidemic died out.

Board of Visitors.—The Board of Visitors regularly visited the Hospital.

Appreciation.—The nursing staff and students have rendered loyal and devoted service throughout the year.

REPORT BY DR. F. WIDLAKE, ASSISTANT MEDICAL SUPERINTENDENT, ON THE X-RAY DEPARTMENT AT THE COLONIAL WAR MEMORIAL HOSPITAL.

I have the honour to submit the following report on the X-Ray Department, Colonial War Memorial Hospital, for the year ending the 31st December, 1936.

2. For the first two months of the year under review, Dr. R. W. D. Maxwell was in charge of the Department, and of the remaining period, Dr. D. C. M. Macpherson was in charge for four months and myself for six months.

3. The X-Ray plant has functioned throughout the whole period and is of a type that permits of any form of radiographic examination being made. Facilities are lacking, however, for X-Ray therapy.

4. During 1936 there were 1,275 patients examined and 1,960 films exposed. The following table shows the details of the various examinations made:—

Patients examined	1,275
Films exposed	1,960
Bones, joints and teeth	827
Chests	170
Barium meals	119
Abdominal viscera	84
Intravenous pyelography	21
Cholecystography	33

The year's figures show an increase on those for 1935. The increase in the number of patients examined was 286, and there were 476 more films exposed as compared with 1935.

5. A portable X-Ray plant is an urgent necessity, not only for the periodic examination and treatment of fractures of the limbs, but also for those patients whose condition is such that it is undesirable that they should be removed from their beds. Many such cases have arisen during the year, and both diagnosis and treatment would have facilitated and improved had a portable plant be available.

6. Mr. F. A. Taylor has continued to act as Technician during the year, and his services have given every satisfaction.

REPORT BY D. C. M. MACPHERSON, GOVERNMENT PATHOLOGIST, ON THE WORK OF THE PATHOLOGICAL AND RESEARCH DIVISION.

I have the honour to submit the Annual Report on the work of the Pathological Laboratories during the year ending 31st December, 1936.

2. The number of routine specimens received and examined during the year was 6,124, a considerable increase over the total for the previous year.

3. Mr. E. Pery-Johnston, formerly a member of the technical staff in the Department of Pathology and Bacteriology at the Otago Medical School, Dunedin, arrived in the Colony and commenced his duties as Technician on the 10th January, 1936.

4. Dr. D. C. M. Macpherson continued to act as Officer-in-charge of the Laboratory, combining the duties at various times with those of the post of Assistant Medical Superintendent Colonial War Memorial Hospital. On 3rd April, 1936, the Secretary of State approved of his appointment as Pathologist to the Government. The Pathologist also acts as Police Surgeon, and since 1st September, 1936, Dr. Macpherson has also been acting as Medical Officer of Health and Port Health Officer for Suva.

5. Native Medical Practitioner Mathu Salato was appointed to be a Native assistant in the Laboratory from 14th April, 1936.

6. As in former years Dr. D. W. Hoodless, Principal of the Central Medical School, has continued to give valuable assistance and advice in connection with the histology of pathological specimens.

7. *New Laboratories.*—The outstanding event of the year was the completion and occupation of the fine new modern laboratories which have been erected behind the buildings of the Central Medical School and the Colonial War Memorial Hospital, and having a frontage and approach to Amy Street.

8. All cupboards, benches, book cases, tables, &c., were made in the Public Works Department's workshops, to standard laboratory designs, and are of polished "ndakua" a Fiji timber closely resembling the Kauri pine of New Zealand.

9. The buildings are constructed of ferro-concrete throughout, ensuring cleanliness, coolness, durability, economy of upkeep and freedom from fire hazards. An immense amount of care and trouble was taken by the Honourable the Director of Public Works and all the members of his technical staff concerned, in the execution of the details of construction, lighting and fitting, and the excellent results are apparent in the comfort and convenience of operation attained. Ample bench, cupboard and shelf space has been provided. Porcelain laboratory sinks, standardised laboratory gunmetal water and gas fittings have been installed throughout, and numerous light and power points are available at all benches. An electric calorifier ensures an ample supply of running hot water throughout the laboratories, and post-mortem theatre.

10. The sum of £5,700 was made available for the initial construction and equipment of the buildings, £3,700 of this being generously donated by the International Health Division of the Rockefeller Foundation. The suite of laboratories comprises the following:—

(*a*) Pathologist's office and library;

(*b*) Lobby with counter for receipt of specimens and their entry in the registers.

(*c*) *Main Laboratory.*—The main laboratory contains, in addition to general equipment, an electric refrigerator with a capacity of 12 cubic feet, an International electric centrifuge (size 2), an electric Kahn shaking machine, 180° C. electrically heated sterilising oven (Weber) constructed of monel metal, electric embedding ovens and agglutination baths, Spencer rotary, and Cambridge "rocker," microtomes.

11. The main incubator, a specially constructed room having 17 inches of insulation, opens direct out of the main laboratory. This room is electrically heated and is provided with special thermostatic control.

12. *Vaccine Laboratory.*—This contains all the equipment necessary for the preparation of standard vaccines.

13. *Biochemical Laboratory.*—A fume chamber, Van Slyke Manometric apparatus for blood gas analysis, Klett "Top Reader," and Bausch and Lomb, Colorimeters, a Leitz Polariscope, Spectroscope, electric blower, dessicator cabinet, analytical balances, and a medium sized electric centrifuge, are included in the equipment of this room. Sets of standardised and certified graduated glassware are available for estimations where a very high degree of accuracy is desired.

14. *Post-mortem Theatre.*—Open tiled drains covered with gratings, special sinks, a small bench provided with gas and electric points, instrument cupboards, shelves, a wall blackboard and a two-tiered stand for students and nurses, are features of this room. A modern autopsy table occupies the centre of the room, and a comprehensive collection of instruments is provided. Much attention has been paid to the lighting, ventilation and fly-proofing of this theatre, and the whole room can be flushed down with a hose after each post-mortem. Sliding doors separate the theatre from a coffining-room.

15. *Dark Room.*—This has been very fully equipped with all the latest types of apparatus for developing, enlarging, trimming and mounting of photographs. A special "Kodak" clinical camera has been taken over from the Hospital, and all clinical photography is now carried out in the laboratory.

16. *Microscopes.*—In addition to the microscopes transferred from the old laboratory, a complete Zeiss Dark Field assembly with automatic carbon arc lamp; a Bausch & Lomb Binocular Research Microscope with apochromatic optical equipment, and a Leitz Binocular microscope complete with optical equipment and interchangeable monocular body, have been recently purchased. All the optical equipment belonging to the older microscopes requires to be sent to the original makers for overhaul and repair, and it is hoped this may be possible during the ensuing year.

17. *Media Preparation and Sterilising Room.*—This room contains a raised concrete sterilising platform, with ample gas and water attachments, is provided with an overhanging hood having special ventilation, and equipped with several types of autoclave and hot air sterilising ovens. Comparators and apparatus necessary for the preparation of the various types of media are also installed.

18. *Parasitology Laboratory.*—This room has been thoroughly equipped for routine parasitological examinations, and for the performance of autopsies on animals.

19. *Chemical Storeroom.*—This contains special shelving and cupboard accommodation for the large supplies of analytical chemicals, stains, &c., which it is necessary to stock in an isolated Colony such as Fiji.

20. *General Store.*—Is specially fitted for the storage of spare glass, procelain and stainless steelware, glass and rubber tubing, and stocks of the innumerable sundries necessary for the working of a laboratory.

21. *Cleaning Room.*—A large automatic Stokes water still is installed in this room, which also contains special sinks, a water-blower, autoclaves and copper boiler.

22. *Gas Plant and Workshop.*—An electric " Silverlite " petrol gas plant supplies gas to all parts of the laboratory. The plant is entirely automatic and gives most satisfactory results. A small work bench is fitted in this room, and a very comprehensive equipment of general and special tools is provided for the upkeep and repair of laboratory apparatus.

23. *Sanitary Accommodation.*—Ample lavatory and washing accommodation is provided.

24. *Veterinary Laboratories.*—Routine veterinary bacteriology and pathology has been carried out on behalf of the veterinary staff of the Agricultural Department for some years, including the occasional preparation of veterinary vaccines. Two well-equipped laboratories, which can be completely shut off from the remainder of the building, have been provided for this work, and could be made available as accommodation for research workers.

25. *Animal Houses.*—These have been constructed on the flat concrete roof of the smaller wing of the building, and are also of reinforced concrete with poilite ceilings. Much attention has been paid to drainage, lighting, ventilation and water supplies. The building is cool, and open air runs for larger animals, completely closed in with heavy gauge crimped wire, are provided on both sides. A kitchen, with storage bins and sink is included. Breeding pens for guinea pigs and rabbits, pipe cage racks with cages, have all been constructed in accordance with the recommendations of the Medical Research Council. A small derrick and winch has been fitted on the roof for the ready hoisting of food supplies and lowering of soiled bedding.

26. *Water Supplies.*—In addition to the routine bacteriological examination of the Suva Water Supply, a series of examinations into the bacteriological content of the Suva Town Baths was undertaken at the request of the Suva Town Board. The examination revealed that bacteriologically the Baths were in a satisfactory state, and a report in these terms was duly submitted to the Town Board. These examinations will be continued in 1937. A considerable number of examinations were made of water from the lower reaches of the Rewa River in the Nausori area, and of water from the Nandi River.

27. *Diphtheria.*—During the examination of a large number of throat swabs, a considerable number of cultures revealed the presence of the Klebs-Loeffler bacillus. In a few instances the presence of the organism coincided with mild clinical diphtheria, in others no symptoms whatsoever where complained of. With the provision of suitable accommodation for animals, it is hoped that virulence tests will afford much more information than we at present possess regarding the local importance to be attached to the presence of this organism in the throats of persons who are apparently otherwise healthy.

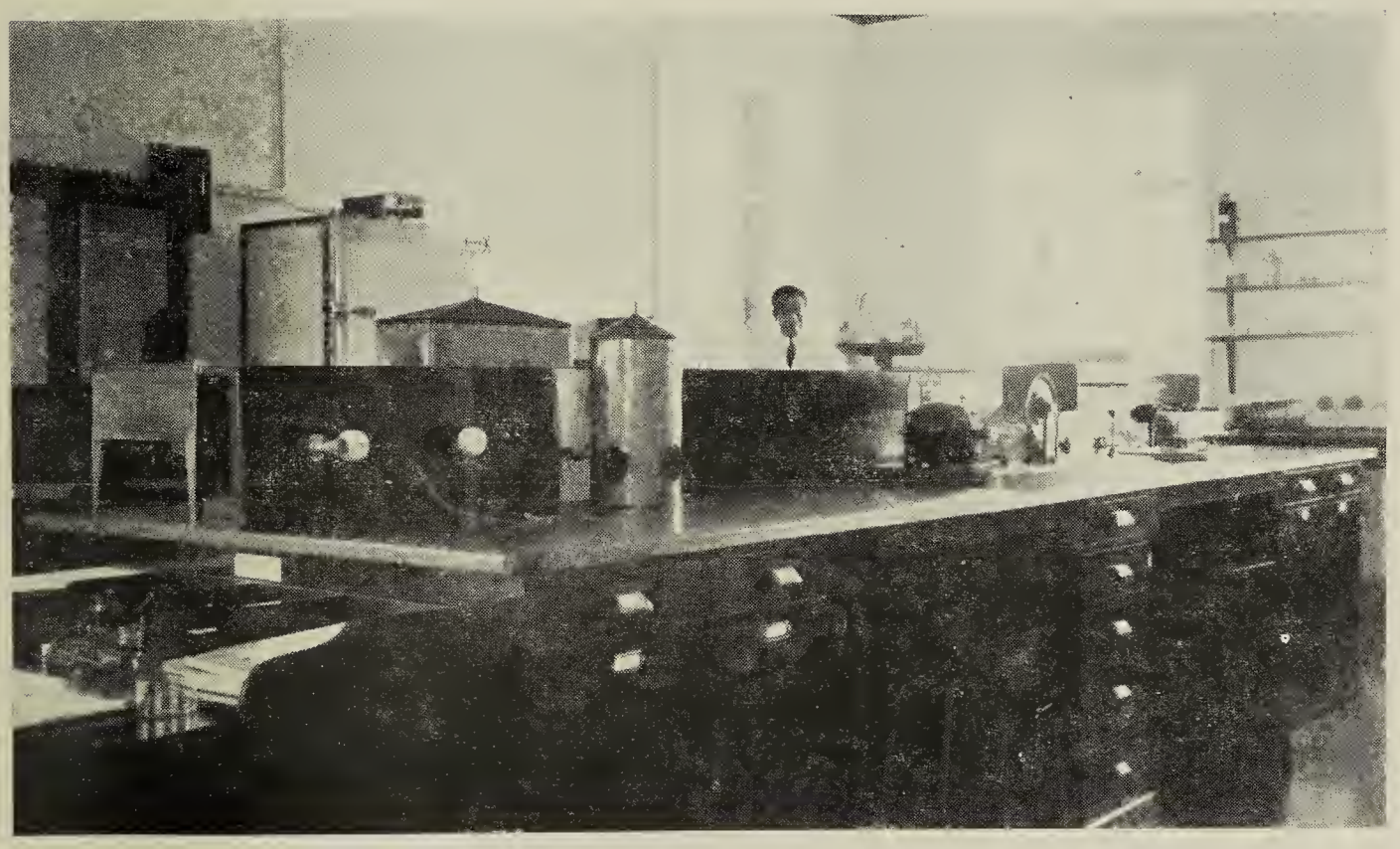
28. *Teaching.*—A course of lectures on general Pathology and Bacteriology was given to Students of the Central Medical School, and European nurses in training at the Colonial War Memorial Hospital. During 1937 it is hoped to combine these lectures with an increased amount of practical work, and experience of methods, and also to give a short course of instruction on Forensic medicine.

29. *Visitors.*—Many distinguished medical men and others passing through Suva have visited the laboratory during the year. The buildings were also inspected by His Excellency the Governor and by the Acting Governor (Mr. Barton).

SUMMARY OF EXAMINATIONS PERFORMED IN THE LABORATORY DURING 1936.

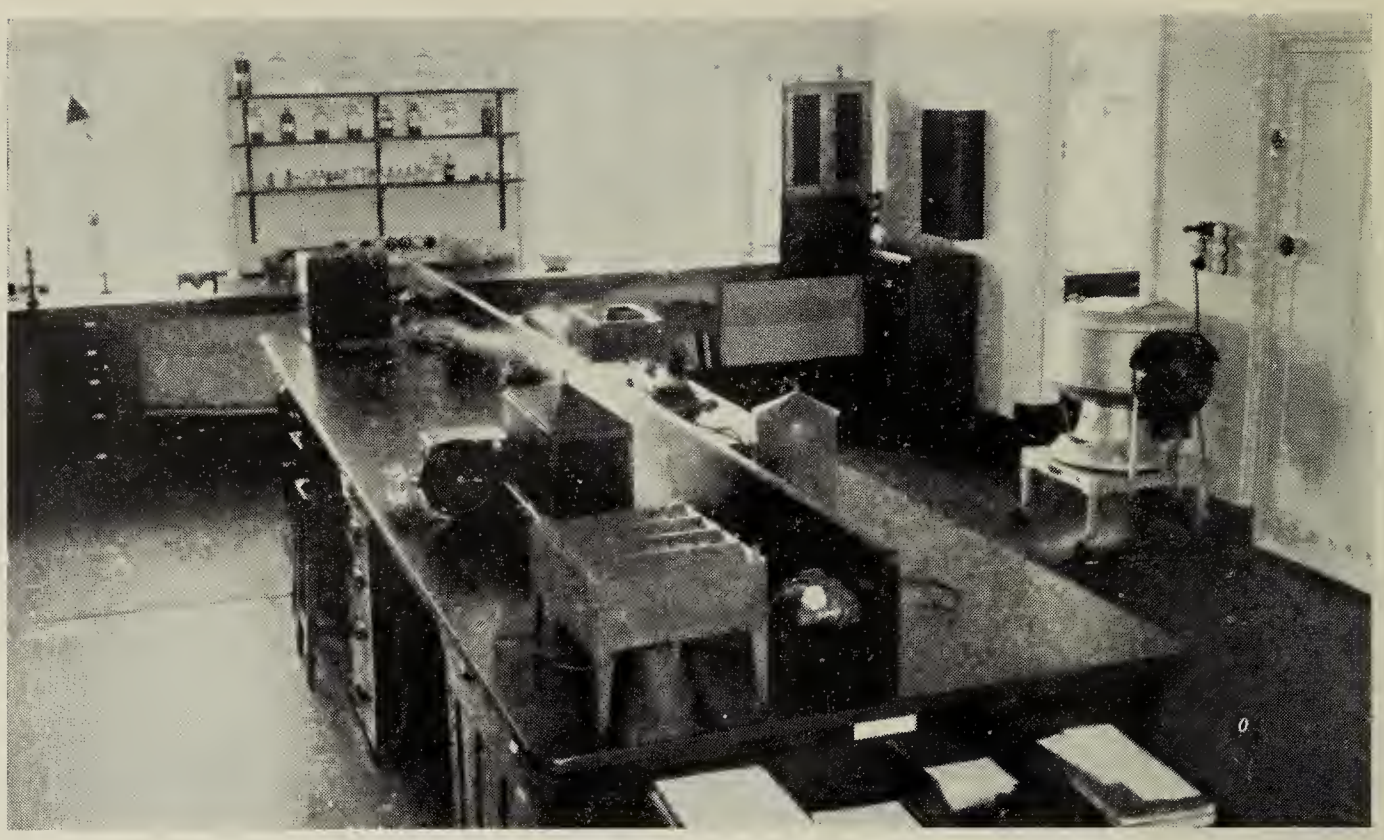
Total number of examinations of fæces for dysentery (A. & B.)	772
Positive Shiga	64
,, Flexner	40
,, Schmitz	23
,, Sonne	8
,, Amœba histolytica	6
Total number of examinations for typhoid and food-poisoning	240
Positive B. typhosus	32
Total number of—	
Kahn Tests performed	373
Throat swabs examined for K.L.B.	562
Sputa examined for T.B.	292
Agglutination tests performed	170
Blood counts performed	223
Blood cultures	81
Biochemical examinations	86
Occult blood examinations	8

FRONTAGE OF BUILDING TO CENTRAL MEDICAL SCHOOL.



PART OF GENERAL BACTERIOLOGICAL LABORATORY.

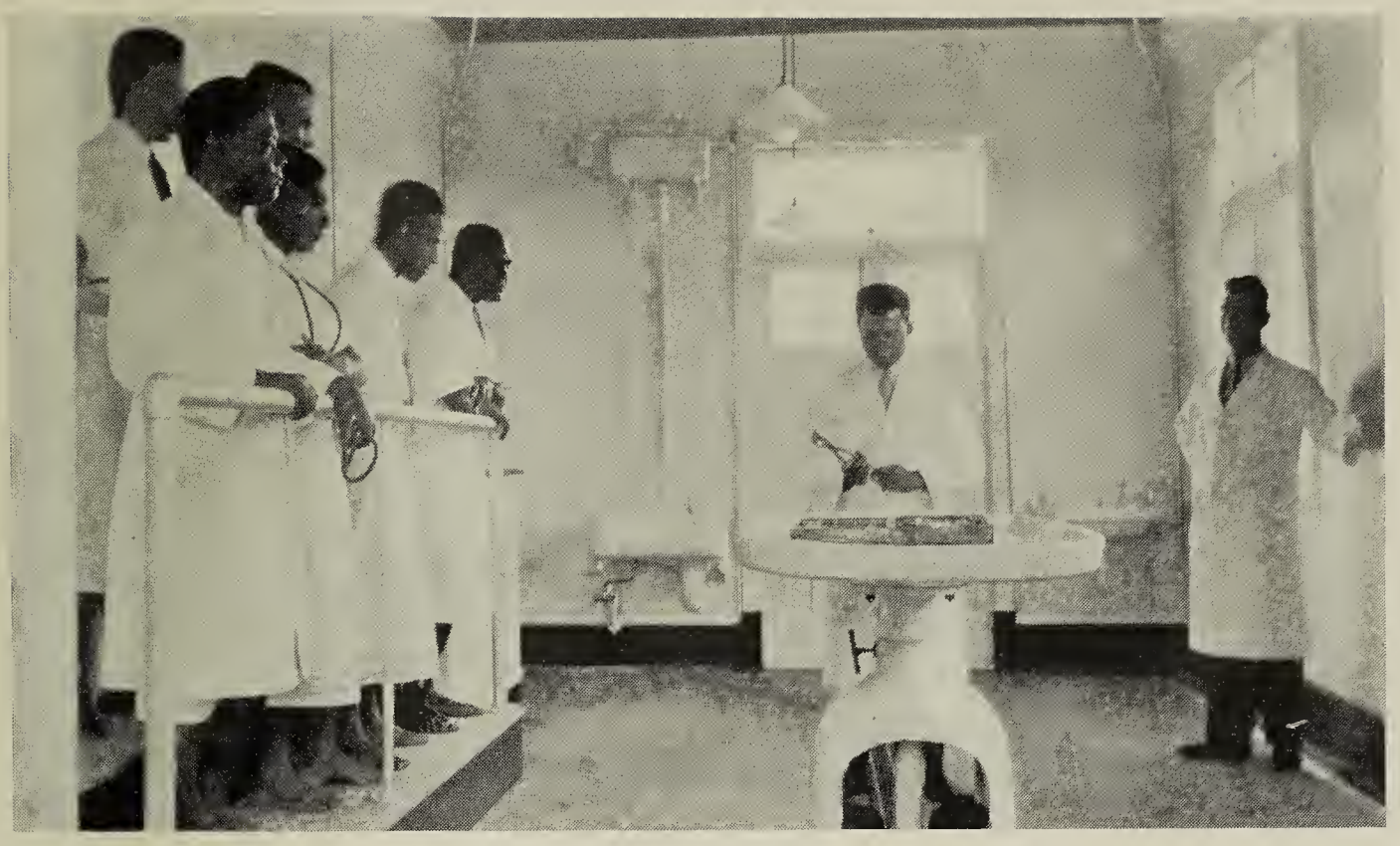
PART OF GENERAL BACTERIOLOGICAL LABORATORY.



GENERAL LABORATORY—DOOR OF INCUBATING ROOM ON RIGHT.

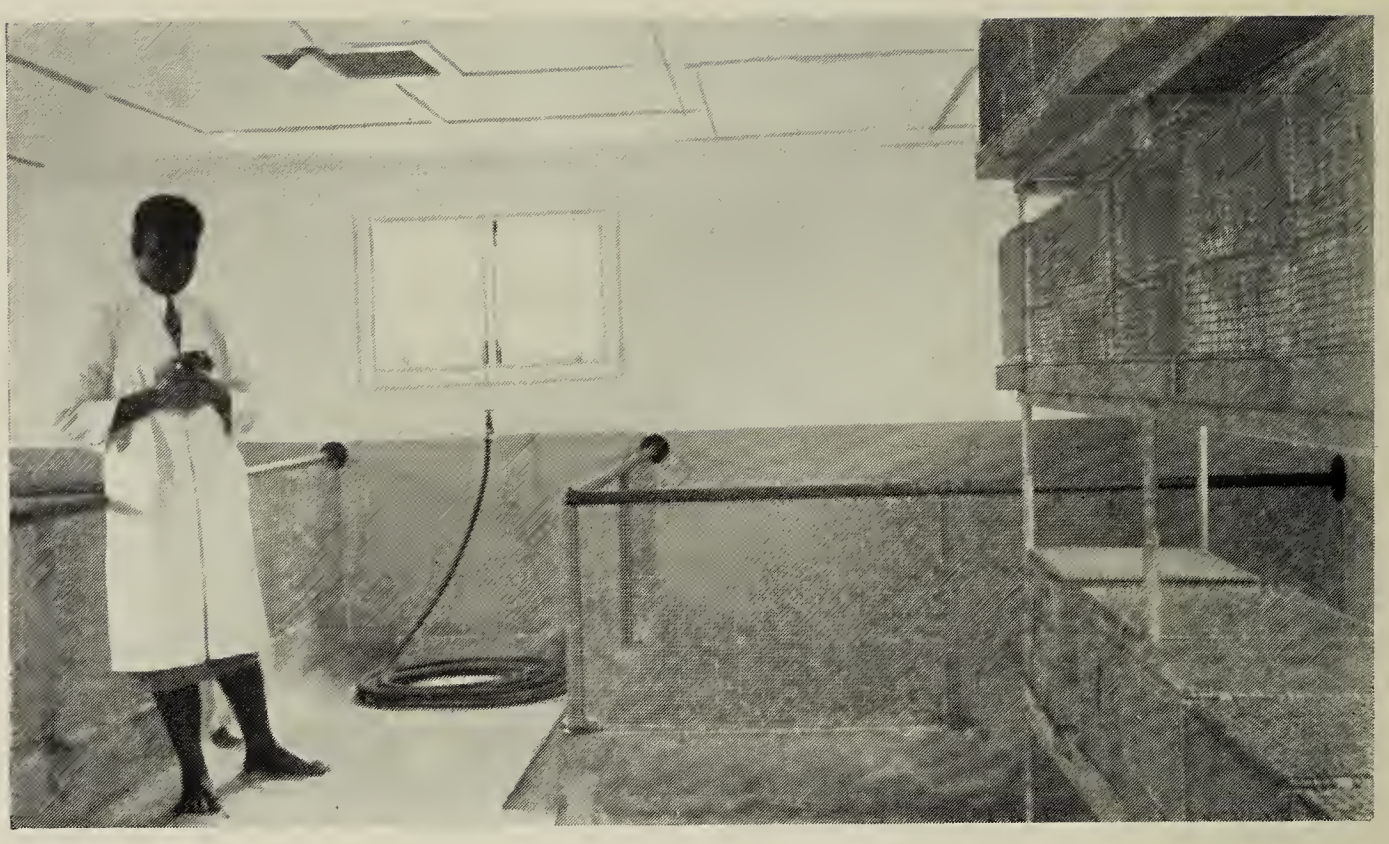
PARASITOLOGY LABORATORY.

STERILISING ROOM.



POST-MORTEM THEATRE—A DEMONSTRATION ON INSTRUMENTS.

PART OF BIOCHEMICAL LABORATORY.



PORTION OF INTERIOR OF ANIMAL HOUSE.

STAFF, PATHOLOGICAL DIVISION.

Milk Examinations	44
Water examinations	122
Pus Examinations	15
Puncture fluid examinations	42
Urine examinations	157
Venereal disease examinations, (other than Kahn Tests)	195
Autogenous vaccines prepared	48
Pathological sections prepared	78
Blood group examinations	108
Stools examined for worms and ova in 1936	1,531

Positive for hookworm	365 = 23·7	per cent of total examined.
,, trichuris	108 = 6·5	per cent. of total examined.
,, Ascaris	86 = 5·6	per cent. of total examined.
,, Oxyuris	43 = 2·8	per cent. of total examined.
,, Trichostrongylus	10 = 0·6	per cent of total examined.

Total number of rats examined for B. pestis	572
Miscellaneous examinations not included above but inclusive of autopsies and medico-legal investigations	405
Total of all examinations performed in the Laboratory for 1936	6,124
do. do. 1935	4,942
Increase during 1936	1,182

In addition to the above, 299 bottles of anti-typhoid vaccine, valued at £336 7s. 6d., and 40 bottles of staphylococcal vaccine, valued at £45, were prepared during the year. Fifty-four clinical photographs were taken, developed, and printed.

REPORT BY Dr. D. W. HOODLESS ON THE CENTRAL MEDICAL SCHOOL, SUVA.

Students.—During the year there were 40 students in residence at the two dormitories. The following table shows the race of the different students in each year:—

	1st year.	2nd year.	3rd year.	4th year.	Post-graduates.	Total.
Western Samoa	2	2	.	.	.	4
Eastern Samoa	1	1	.	.	.	2
Tonga	2	1	.	1	.	4
Cook Islands	1	2	.	.	.	3
Gilbert and Ellice Islands	2	1	.	1	.	4
Solomon Islands	1	1	1	1	.	4
New Hebrides	.	.	1	.	.	1
Nauru	.	1	.	.	.	1
Fiji—Fijians	4	4	.	5	2	15
Rotumans	.	.	.	2	.	2
Indians	.	1	.	1	1	3
	13	14	2	11	3	43

The three post-graduates in the above list are qualified Native Medical Practitioners and do not reside in the students' dormitories. From 1st November, 1928, when the Medical School was opened it has been customary for 12 Fijian students to reside at the smaller dormitory and the remaining 28 students to reside at the larger dormitory, but this arrangement has many disadvantages. Instead of two dormitories more than a quarter mile apart it would be much more economical to have one large cement dormitory with accommodation for 45 students, and three or four students in each bedroom instead of the present arrangement of single bedrooms which is contrary to the usual native practice.

Health.—This year has been an unfortunate one from the point of view of health. Out of 13 students in the first year, nine have been absent from lectures owing to illness for periods varying from four days to 15 weeks, with an average absence of 27 days per student. About half the total number of students had a mild attack of measles during March–April, causing an absence of one to three weeks, and about a quarter of the students had mumps during August–November with an absence from lectures of one week. Neither of these epidemics had any serious complications amongst the students, but there were several cases of pneumonia in August-September, three of which were very serious and two of them required surgical treatment. After careful consideration I am unable to attribute this abnormal amount of illness to any fault in the students' diet, clothing, hours of study, &c. During the year the students' ration scale has been improved by extra milk and extra vegetables, and a reasonable supervision has been maintained generally.

Discipline.—The discipline of the students has been excellent throughout the current year. Amongst the various racial types at the School there are the usual different temperaments, which vary from frankly boisterously sanguine to solemnly phlegmatic, but they all join up into a united body of 40 students with a very good *esprit de corps*. English is the general medium of instruction, both at lectures and in clinical instruction; and English is also generally used amongst the students themselves. Contrary to what one might expect, the students do not break up into separate race-groups, but they mix freely into miscellaneous groups so that even during their leisure hours English continues to be used as a rule, and it is unusual to hear one or other of the native languages being spoken except in the "Fijian" dormitory.

Courses of Studies.—In 1931 the course of studies was extended from three years to four years. This four years' course is divided into a junior period of 1½ years followed by a senior period of 2½ years. The junior students receive instruction in Physics, Chemistry, Biology, Anatomy and Physiology and attend the Medical School every morning and afternoon. The senior students are on duty in the hospital from 8 a.m. to 1 p.m. each day, and attend lectures in the afternoons or evenings by the members of the honorary staff which includes twelve lecturers, eight of whom are Medical Practitioners. The senior students act as dressers and clinical assistants in the hospital, and form an integral part of the staff of the hospital under the direction of the Medical Superintendent. The duties of the senior students in the hospital include work in the medical wards, surgical wards, women's wards, European wards, out-patients, and night-duty. Strictly speaking the junior students are not required to do any hospital duty, but in actual practice one or two of them volunteer every afternoon for relieving duty in the out-patients' department or for "special-duty" while the senior students are at lectures; and again, during the Christmas and mid-year holidays all the junior students put in four weeks of relieving duty in the hospital so that the senior students may take their own holidays.

Examinations during 1936.—The usual final examinations were held during the last three months of the year. Out of eleven students in the fourth year ten of them passed the qualifying examinations in all subjects and will be granted their certificates as qualified Native Medical Practitioners. The remaining student who is from the Gilbert and Ellice Islands, failed in Public Health and in Surgery. At the next meeting of the Advisory Board it will be decided whether this student shall be allowed to continue for a further period of training in order to complete his qualification, or whether he shall be sent back as an unqualified hospital assistant.

Third-year students.—There are only two students in this year, and both were successful in Anæsthetics, but one failed in Materia Medica. No other class examinations were held for these students.

Second-year students.—Out of 14 students in the second year, four failed in Materia Medica and two in Anæsthetics. The usual class examinations in Surgery and in Medicine were not held for these students.

First-year students.—There are 13 students in this year, and all of them passed their qualifying examinations in Physics and Biology in June, 1936. Lectures and practical work in Anatomy and Physiology were commenced in July, and good progress has been made in both these subjects. At the recent quarterly examinations eleven students passed in Anatomy and Physiology, one student failed in both subjects, and one student failed in Anatomy only.

Class Prizes and Medals.—

Sir Maynard Hedstrom's gold medal in Public Health has been awarded for 1936 to Banuve Tailasa Vakatawa (Fijian).

The Hon. Alport Barker's gold medal in Medicine has been awarded for 1936 to Banuve Tailasa Vakatawa (Fijian).

The British Medical Association (Fiji branch) gold medal in Surgery has been awarded for 1936 to Isime'eli Lutui Fonua (Tongan).

The Hon. Dr. A. H. B. Pearce's gold medal in Obstetrics has been awarded for 1936 to Banuve Tailasa Vakatawa (Fijian).

Sir Henry Scott's gold medal in Anatomy has been awarded for 1936 to Terenuku Williams (Cook Islands).

The Administration of Western Samoa has donated a new medal in memory of the late Native Medical Practitioner Ielu Kuresa who died on March 26th, 1936. The first award of this medal will be made in 1937, and although complete details have not yet been finalised it will probably be awarded to the student (other than Samoan) who shows the best all-round efficiency together with a sound knowledge of Diseases of Children.

The list of class prize-winners is as follows:—

First Year.

Physics	James Rennie (Cook Is.).
Biology	Tevita Fotu (Fiji).
Anatomy	Amosa Sio (W. Samoa).
Physiology	Amosa Sio (W. Samoa).

Second Year.

Anatomy	Terenuku Williams (Cook Is.).
Physiology	Tuariki Nia Rua (Cook Is.).
Materia Medica	Peti Tofaeono (W. Samoa).
Anæsthetics	Peti Tofaeono (W. Samoa).

Third Year.

(No prizes awarded.)

Fourth Year.

Medicine	Banuve T. Vakawata (Fiji).
Surgery	Isime'eli L. Fonua (Tonga).
Obstetrics	Banuve T. Vakatawa (Fiji).
Public Health	Banuve T. Vakatawa (Fiji).

Lecturers.—The following list gives the names of the lecturers and the subjects taken during 1936:—

Obstetrics	Dr. A. H. B. Pearce.
Public Health and Hygiene	Dr. S. M. Lambert.
Surgery	Dr. T. Clunie.
Medicine	Dr. F. Widlake.
Diseases of Children	Dr. W. M. Ramsay.
Diseases of the Eye	Dr. C. H. B. Thompson.
Bacteriology	Dr. D. C. M. Macpherson.
Anæsthetics	Dr. I. H. Beattie.
Dentistry	Dr. L. B. Hart.
Materia Medica	Mr. D. K. Palmer.
Anatomy and Physiology	Dr. D. W. Hoodless.
Chemistry	Mr. W. J. Blackie.
Biology and Physics	Dr. D. W. Hoodless.
Book-keeping	Mr. C. A. Brabant.

In addition, numerous demonstrations in practical and clinical work were given by the members of the European nursing staff, and the qualified Native Medical Practitioners on the staff at the Hospital and at the Bacteriological Laboratory.

Clinical Studies.

Dr. T. Clunie, Director of Clinical Studies for the senior students reports as follows:—

The usual clinics and demonstrations were held during the teaching year. Surgical clinics were regularly attended, but medical clinics could not be arranged regularly because of staff shortages during the transfers of Assistant Medical Superintendents. During these periods Dr. D. W. Hoodless and Dr. D. C. M. Macpherson assisted in clinical teaching.

The new Pathological and Bacteriological Laboratory was not completed in time to be of use in teaching side-room methods and pathology. It is hoped that during 1937 arrangements will be made for the more advanced systematic and practical teaching of pathology, including post-mortem technique, parasitology, examination of blood, stools, urine, &c. It is also hoped that this course will include lectures and demonstrations in Forensic Medicine.

Obstetric and Child Welfare.—The Obstetric Ward is very cramped. Cases have to be delivered in the Ward, there being no labour theatre. This prevents proper attendance of Native Medical Practitioners and Medical Students at labour cases as the patients object to their presence in the Ward during labour. It is believed that the presence of a large labour theatre would do away with these objections, and it is hoped that this matter will be considered when the new Obstetric Ward is planned.

Ante-natal Clinics.—Are being better attended. The increase of the attendance is attributed to the keenness and interest shown by Sisters Retemeyer, Cleary and Walton, and to the gradual realisation by the mothers of the value of infant welfare work and the elimination of their shyness at being attended by Native male practitioners.

My old friend, the late Ratu Joni Mataitini, who was a Medical Practitioner, and a High Chief of Fiji, told me some years ago, that 10 years passed before the first Native Medical Practitioner could examine and treat women and children. He anticipated that at least five years would pass before Ante-Natal Clinics would be freely attended. I attach a report on the Ante-Natal Clinic.

Anaesthetics.—Dr. I. Hamilton Beattie delivered systematic lectures on Anaesthetics and assisted in practical training in co-operation with the Assistant Medical Superintendent. The great majority of Senior Students each administered 20 anæsthetics. The Medical Superintendent and Dr. F. Widlake demonstrated to Senior Students and Practitioners the use of Evipan as a general anæsthetic.

All Students completed their rounds of duty in the Wards, Obstetric Ward and Eye Department, Dispensary, Bacteriological Laboratory and Operating Theatre. The honorary lectures given by Dr. Hart, and practical hints given by Mr. Mount, Dental Surgeon, were greatly appreciated by the Students.

Health.—Measles and mumps were prevalent during the year. It was noticed that Fijians had a mild attack of measles, but that Polynesians suffered severely and underwent a prolonged convalescence. Gilbertese, Ellice Islanders and Tongans seemed to be the most affected. This is probably due to the fact that measles has been endemic in Fiji following the great epidemic of 1875, and that the Fijian race has developed a relative immunity. A Samoan and a Gilbertese student developed empyema following pneumonia; they were very ill, but recovered following thoracotomy. A Student of mixed European and Solomon parentage had double pneumonia, but recovered after prolonged convalescence.

The general health of the Students has been fair, but it is believed that the employment of night attendants to relieve the Students of night duty, enforcement of more regular hours of sleep, removal of Students' Quarters to an available site away from the Hospital grounds, and the provision of a sports field would go far towards improving their health. The diet appears to be adequate, but cooking and service could be improved.

Appreciation.—The Students have worked hard during the year, showing much keenness in both study and hospital attendances. To them and to Native Medical Practitioners, attending Post-Graduate Courses, the Hospital owes a debt of gratitude. The interest taken by the Matron and Sisters is greatly appreciated.

Post-Graduate Training.—Post-Graduate Courses cover a period of six months, during which an endeavour is made for each post-graduate student to do a tour of duty in the Out-patient Department and the Medical and Surgical wards. Post-Graduates also attend lectures and clinics

and assist Medical Officers in Wards and at operations, administer anæsthetics, and are expected to attend post-mortems and demonstrations in the Laboratory. In order to encourage a spirit of self-reliance Post-Graduates act as House Physicians and House Surgeons and as Consulting Officers. They are responsible for the care and treatment of certain patients, and carry out such operations as radical cure of hydrocele, radical cure of hernia, relief of strangulated hernia, appendicectomy, &c., and are made conversant with the technique of spinal and local anæsthesia. They must attend the Ante-Natal Clinic and visit neighbouring villages under Child Welfare control.

Native Medical Practitioners who carry out their duties satisfactorily and whose character reports are favourable during the Course receive a Post-Graduate Certificate.

The following graduates attended Post-graduate courses during the year:—

N.M.P. Wiliame Bokonagiwa Tavai (Fiji Service) May–September.
N.M.P. Filimone Rasigatale (Fiji Service) 27th January–4th August.
(This N.M.P. has had an exclusive training in Laboratory work).
N.M.P. Jiobe Vunibokei (Fiji Service) 5th August, 1935–25th January, 1936.
N.M.P. Tutu Tekanene (Gilbert and Ellice) 5th November, 1935–21st January, 1936.
N. M. P. Luke Savu (Fiji Service) 4th August, 1936–31st January, 1937.

Of the above the following were recommended for Post-Graduate Certificates:—

N.M.P. Wiliame Bokonagiwa Tavai.
N.M.P. Filimone Rasigatale.
N.M.P. Tutu Tekanene.
N.M.P. Luke Savu.

Games.—Regular games were played by the Central Medical School Rugby team from April to September, 1936, but the results were poor, and the team was unable to retain the Costello Challenge Shield won in 1935. Up to the present we have not been able to form a cricket association in which the Central Medical School cricket teams can play, but efforts are now being made in this direction. Table-tennis is a very popular indoor-game, and two new tables have been purchased during 1936. A wireless set was presented to the students by Miss E. J. Garnett and has been used regularly every evening for local and foreign stations. There is a string band which is very popular among the students, twelve of whom have their own instruments, and this string band has given several performances at the local broadcasting station. Every endeavour is made to encourage the students in healthy sports and pastimes, and due care is taken so that their medical studies are not neglected.

On October 20th Mr. Richard Crooks, leading tenor at the Metropolitan Opera, New York, gave a concert in aid of the Central Medical School sports' fund, and £80 was thereby obtained. The students sincerely appreciated this very generous assistance by Mr. Richard Crooks whose help was obtained through the kind services of Dr. S. M. Lambert.

During the year a school badge was designed and made for use on school blazers. From the sports' fund a grant of half the cost of each blazer is made to all students.

Terms and Vacations.—The school year is divided into four quarters, commencing on January 15th and ending on December 15th. The students are given two weeks' holiday at Christmas and again at the end of June. Half the number of students are away for two weeks, and then the other half have two weeks' holidays. There are therefore two periods of four weeks each when no lectures are given. In December this year there are only three students other than Fijians in the 4th or final year, so that it will not be difficult to arrange for the return of these three students to their own native homes—Tonga, Ocean Island, and the Solomons.

Board Meetings.—Two meetings of the Central Medical School Advisory Board were held during 1936 with the Director of Medical Services, Dr. A. H. B. Pearce, as Chairman. The other members of this Advisory Board were Dr. S. M. Lambert of the Rockefeller Foundation, Dr. T. Clunie Medical Superintendent of the Colonial War Memorial Hospital, and Mr. H. Vaskess, Secretary to the Western Pacific High Commission. Dr. D. W. Hoodless was secretary to the Board during 1936. The Board continued to carry out its routine business of recommending the award of certificates to newly-qualified Native Medical Practitioners, deciding the number of new students to be admitted from each participating Administration, selecting the New Fijian students for the following year, and making suitable recommendations on lectures, courses of studies, regulations, disciplinary measures, and improvements to buildings.

Visitors.—The number of visitors to the Central Medical School during 1936 was 75, as compared with 125 during 1935. Amongst the distinguished visitors this year were Lord Trent, the Bishop of Melanesia, Professor A. P. Elkin of Sydney University, Mr. Arthur Mayhew of the Colonial Office, London, Sir James Barret, President of the British Medical Association, Mr. Hardie Neill and Sir Carrick Robertson both to Auckland. The usual practice was continued whereby black-board and practical demonstrations in anatomy were given by junior students to medical visitors. Perhaps it may not be out of place to add that these demonstrations in anatomy are not given with a view merely to show to the visitors the kind of training which is being given, but also to prove to the native students themselves that their training is similar in many ways to that of other medical students in all parts of the world. With regard to the visitors during 1936 a pleasing feature was the number of visitors from the various Missions spread over the island groups in the South Pacific and this is indicative of the close co-operation of the work of the qualified Native Medical Practitioners with the Missionary Societies in the South Seas.

Finance.—The annual cost per student for the years 1930 to 1935 has been:—1930, £76 13s. 5d.; 1931, £75 17s. 5d.; 1932, £75 4s. 10d.; 1933, £76 19s. 2d.; 1934, £73 4s. 3d.; and 1935, £72 2s. 6d. The corresponding figure for 1936 is not yet available, although it has been estimated at £76 approximately. This annual expenditure covers board and lodgings, tuition

fees, maintenance expenses, clothing, servants' wages, and a small pocket-allowance of 10s. per month per student. It will be seen therefore that each student costs about £75 per annum, so that the four years' course of studies costs about £300 per head, to which must be added any extra expenditure for transport to and from Fiji. The assisting contributions paid by the Rockefeller Foundation of New York ceased in 1932, and since that time no grants-in-aid have been received from Imperial or other sources.

The Medical School and the N.M.P. Service in Fiji.—The first N.M.P. certificate was signed on 12th November, 1888, and since then 185 certificates have been issued to qualified Native Medical Practitioners. Of these, 40 are for other than Fijians, so that 145 remain for Fijian graduates. Of these, 145 qualified men only 60 are now in actual practice in the Fiji Government service. At the present time although there are nominally five Fijian medical students in each year of training the average number of students who qualify each year is only four. An examination of the number of qualified Fijians who have left the service during the last ten years shows an annual loss of two, so that the net increase in the number of Fijian Medical Practitioners is only two each year. It may reasonably be stated therefore, that there is no danger in training too many Fijian Medical Practitioners under the present system, for at the present rate it will take another 20 years to build up a crop of 100 qualified Fijian practitioners. In round numbers, and not taking into consideration the European Medical Practitioners, it may be stated that there is one Fijian Native Medical Practitioner for every 1,600 of the Fijian population If the six Indian Medical Practitioners and the 86 000 Indian population are included there is one qualified man for 2,700 of population

The Medical School and other N.M.P. Services.—At the present time an endeavour is being made to build up a Native Medical Practitioner service in other island groups in the South Seas. Western Samoa has a corps of nine qualified men, the Gilbert and Ellice Islands have eight. In Tonga there are six Native Medical Practitioners, two in the Solomon Islands, and three in the Cook Islands. Each one of these Administrations is slowly building up a Native Medical Practitioner service at the rate of one qualified man per annum. In November this year however, the Administration of Western Samoa requested that their quota of students at the Central Medical School in Fiji be increased so as to accelerate the rate at which Samoan Native Practitioners can return for service in their own islands. The C.M.S. Advisory Board has willingly agreed to this increase of Samoan students but with the limited dormitory accommodation a complete reorganisation of the Medical School will be necessary if other Administrations make requests for similar increases.

The agreement between the groups co-operating in the Central Medical School which was to last for 10 years will be subject to discussion during 1937 as the 10 years' period ends in 1938. The chief item for discussion will be the allocation of studentships for each Administration for the next period of 10 years. The number of qualified Native Medical Practitioners which may be considered sufficient for any group cannot be based on the population only. For example, a compact group such as Western Samoa would require less than a scattered group such as the Cook Islands. Again, Tonga has many widely-scattered islands, and in the Gilbert and Ellice Islands there are nearly 30 islands all more or less remote from one other.

No serious difficulty is anticipated in making suitable arrangements for the future training of native medical students for the various Polynesian groups including the Cook Islands, Tonga, Western and Eastern Samoa. Difficulties will arise however both for the western Melanesian groups and the northern Micronesian groups. The students selected for entry to the Medical School from the Gilbert and Ellice Islands during the past few years have been much below the general average of conduct and general behaviour. During the last eight years we have had only one native student from the New Hebrides, and that Administration may now for all practical purposes be regarded as outside the scheme of co-operation. From the point of view of training medical students the British Solomon Islands is indubitably the most difficult problem. Up to the present only two natives have been trained as qualified men, and at present the quota of this Administration consists of three half-caste European students and one half-caste Solomon-Fijian.

By drawing attention to some of the above difficulties I do not wish to belittle in any way whatsoever the undoubted success that the Medical School has obtained in the past few years. Each year numerous medical visitors to the School have expressed their opinion that the standard of medical training given here is very satisfactory. Good reports about former students have been received during the year from the New Hebrides, Tonga, and Western Samoa. But we would like to hear also any reasonable criticism of our system of training. One criticism from Samoa is that our discipline is too lax and that the students are becoming too Europeanised. A four years' course of training in Western medicine must obviously lead to a good deal of Europeanising, but at the same time every endeavour is being made to maintain and uphold native customs in dress and conduct as far as it is practicable to do so. The members of the C.M.S. Advisory Board felt that there might be a more intimate and possessive relationship between the various Administration and the Medical School, and the Board would like to receive more criticisms along with constructive suggestions as to remedies.

Conclusion.—No annual report on the Central Medical School would be complete without due acknowledgment of the assistance given to the School by the members of the honorary staff and of the general direction and control exercised by the Director of Medical Services, Dr. A. H. B. Pearce. This acknowledgment is now made, and it is made on behalf of all the stud nts, junior and seniors, for the cordial and friendly relationship which has existed during 1936 between all members of the staff and all the students.

REPORT BY Dr. C. J. AUSTIN, MEDICAL SUPERINTENDENT, CENTRAL LEPER HOSPITAL, MAKONGAI.

I HAVE the honour to submit the report of the Central Leper Hospital, Makongai, for the year 1936.

In view of the fact that the twenty-fifth anniversary of the Hospital occurred during the year, a short review of the history and progress of the institution from its inauguration in 1911 may be appreciated as an introduction to the actual report.

The island of Makongai—about two and a half miles long and one and a half in width—was purchased by the Government of Fiji in 1909 for the specific purpose of segregating cases of leprosy. The latter policy had already been carried out on a small scale on the island of Mbengga, but with the proposed introduction of compulsion, an island not otherwise inhabited became necessary, and Makongai, hitherto a coconut plantation, was selected for the purpose.

Forty patients were transferred from Mbengga to Makongai in November and December of 1911, buildings having been erected, a doctor and two Sisters of the Order of Mary appointed, and a native staff for farm work collected. It is noteworthy that thirty-six of this number had been voluntary admissions to Mbengga, the four others having been transferred from the gaol or lunatic asylum. Of these original admissions, three survived to 1934, and the final survivor—who had been a patient at Mbengga for some years before his transfer died in 1936.

Numbers increased rapidly in 1912 to 154, and then more gradually to 300 in 1917, remaining around that figure for the next ten years. From 1927 onwards the Hospital began to merit its present title of " Central Leper Hospital," for a scheme was started by which patients were sent to Makongai from New Zealand and its dependencies—the Cook and Niue Islands, and Western Samoa—as well as from Tonga. A " peak year " was reached in 1935, when the Gilbert and Ellice Islands Colony entered the scheme, and the total of patients at the end of the year numbered 575.

Over two thousand patients have been admitted during the quarter century, but a number of Indians, particularly during the early years, were admitted only for short periods of treatment prior to repatriation. Voluntary repatriation is still permitted by an arrangement with the Government of India, provided the latter can trace relatives willing to assist, but the number of applicants is now very small.

It was not until the year 1918 that an amendment to the Leper Ordinance was passed allowing the conditional discharge of patients certified by a Medical Board as having been free from activity for a minimum period of two years. Such patients were to report themselves every three months to the Medical Officer of their district, without whose permission they were not allowed to change their domicile. Three hundred and sixty-three patients benefited by this clause, of whom sixty-two have later returned to Makongai. The majority of the latter, however, have been re-admitted for trophic lesions due to previous nerve damage, and cannot, therefore, be regarded as relapses.

The island is arbitrarily divided into a patients' area and a " clean " area tambu to patients. No irritant boundary fence is required and the recognised boundary line is loyally observed by the patients. The clean area includes the houses for the staff and farm labour, and the dairy, bakery, and soap factory; the patients' area includes the Hospital itself, and five outlying villages for able-bodied men, distributed according to race. Ample space is set aside for gardens, &c. Coconuts, breadfruit and citrus fruits abound, and the patients cultivate bananas, cassava, yams and taro, and to a less extent, European vegetables.

The main water supply depends on a dam constructed in a gorge well above the Hospital level, which is said to hold about 900,000 gallons. Sufficient pressure is thus obtained for the supply of the villages as well as the higher buildings in Hospital.

A three-mile motorable road connects the two ends of the island, and in addition to its use by the staff, allows the daily transport of milk, bread, &c., from the clean area to the Hospital. Communication with Levuka—about 17 miles—or Suva—about 60 miles—is by an auxiliary cutter, which brings weekly mails, stores, &c.

The steady increase in the number of patients naturally necessitated a parallel growth of staff, and the present Nursing Staff consists of fifteen European Sisters of the Society of Mary, and ten Fijian Sisters of the same Order. It is safe to say that without their enthusiastic work and unceasing devotion the results obtained would have been impossible. The recent award by His Majesty the King, of the Hon. M.B.E. (Civil Division) to the Reverend Mother Agnes, Sister-in-Charge, represents the recognition by the Government of the value of the splendid work of the Sisterhood, and was a source of great satisfaction to the patients and to all who had anything to do with Makongai.

TABLE .I—STATISTICS FOR THE YEAR 1936, CENTRAL LEPER HOSPITAL, MAKONGI.

	European.	Half-Caste.		Fijian.		Melanesian.		Indian.		Rotuman.		Chinese.	Samoan.		Maori.	Niue Is.		Cook Is.		Tongan.		Gilbert Is.		Total.
	M	M	F	M	F	M	F	M	F	M	F	M	M	F	M	M	F	M	F	M	F	M	F	M F
In the hospital 1/1/36	3	7	2	91	38	43	4	145	45	29	22	9	12	6	1	1	3	27	26	7	9	30	15	405+170=575
Admissions	..	1	..	10	5	3	3	30	7	..	..	1	..	..	..	..	..	..	..	..	..	..	..	45+ 15= 60
Deaths	..	1	..	13	4	5	..	12	5	2	..	1	2	1	..	..	..	2	1	..	..	5	..	43+ 11= 54
Conditional discharges . ..	..	..	..	4	..	2	..	13	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	20 = 20
Repatriations	..	..	..	..	..	..	..	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6 = 6
Remaining in the hospital 31/12/36	3	7	2	84	39	39	7	144	47	27	22	9	10	5	1	1	3	25	25	6	9	25	15	381+174=555
Total . ..	3	9		123		46		191		49		9	15		1	4		50		15		40		555

The above and the following tables indicate that Indians continue to present the main problem in Fiji. Of the sixty admissions, thirty-seven were Indians and only fifteen Fijians.

Table II, showing the new patients classified according to nativity and type of leprosy, is fairly satisfactory as showing twenty-five of the sixty admissions in the comparatively non-infective Neural stages, and the complete absence of advanced Cutaneous cases. Little difference is to be noted between the Fijians and Indians as regards type and stage of the disease, proportions being 40·0 per cent. and 43·2 per cent. Neural respectively. This question of the stage of disease is, of course, of vital importance with reference to prognosis, Neural cases being on the whole much more amenable to treatment than Cutaneous cases.

TABLE II.—ADMISSIONS, 1936.

	Neural 1.	Neural 2.	Neural 3.	Cutaneous 1.	Cutaneous 2.	Cutaneous 3.	Total.
Half-Caste . ..	.	..	..	.	1	..	1
Fijian	1	4	1	.	9	..	15
Indian	2	14	..	1	20	..	37
Solomon	2	1	..	2	1	..	6
Chinese	.	..	.	.	1	..	1
	5	19	1	3	32	..	60

For the purpose of survey, the records of 616 patients who had been six months or more during the year at Makongai have been investigated. These 616 patients are classified in Table III to show the relation of patients according to nativity and type of disease, the sexes being distinguished throughout. It may be noted as between Fijians and Indians that 44·2 per cent. of the 138 Fijians are Neural, and only 32·2 per cent. of the 220 Indians. On the other hand, 20·3 per cent. of the Fijians are Advanced Cutaneous cases but only 3·1 per cent of the Indians have reached that stage. This anomaly has been pointed out in previous reports, namely, that although the Indian appears to reach the moderately advanced stage of leprosy more readily than the Fijian, he comparatively rarely passes into the fully advanced stage. The typical "leontiasis" of Advanced Cutaneous leprosy is much less common in the Indian than in the Fijian sufferer.

TABLE III.—RACE IN RELATION TO TYPE OF LEPROSY.

	Neural 1		Neural 2		Neural 3		Cutaneous 1		Cutaneous 2		Cutaneous 3				Total
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
European	..	..	..	..	1	..	..	..	2	..	..	..	3	..	3
Half-Caste	..	..	..	..	..	..	..	..	6	1	..	..	6	1	7
Fijian	10	6	22	18	4	1	12	2	28	7	22	6	98	40	138
Indian	16	5	29	16	3	2	28	3	87	24	6	1	169	51	220
Solomon Islanders	9	2	8	3	2	..	5	1	16	1	5	..	45	7	52
Rotuman	4	11	13	9	..	..	..	..	10	2	2	..	29	22	51
Cook Islanders	4	7	7	4	1	1	4	2	9	10	2	1	27	25	52
Gilbert Islanders	5	3	3	3	1	..	3	1	13	4	5	4	30	15	45
Samoan	..	..	2	1	..	..	2	..	6	4	2	1	12	6	18
Chinese	..	..	1	..	..	..	..	..	6	..	3	..	10	..	10
Tongan	..	..	1	..	1	1	1	3	4	3	..	1	7	8	15
Niue Islanders	..	1	..	..	..	..	..	2	1	..	..	..	1	3	4
Maori..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	1
	48	35	86	54	14	5	55	14	188	56	47	14	438	178	
Total	83		140		19		69		244		61		616		616

Treatment.

There is no question that general hygienic measures are of at least equal value with specific drugs in the treatment of leprosy. Nourishing food, fresh air, exercise and freedom from worry and boredom are vitally important factors. Patients at Makongai are encouraged to undertake open air work in their gardens, which are in themselves valuable sources of additional food for them, their surplus produce being bought for Hospital needs. Public work on buildings and roads is open to the able-bodied, while prizes are offered from time to time for cricket, tennis, canoe racing and other sports. For the further prevention of ennui and brooding, there are evening cinema shows, concerts by their own band, as well as the provision of picture papers, &c.

From the point of view of specific therapy, iodised Chaulmoogra oil as described in previous reports, retains its popularity over other drugs, According to patients' accounts, the injection is less painful than the previously used iodised ethyl esters of the oil, and although it is a much thicker product, abscess production is comparatively rare in view of the large number of injections given. The majority of patients further continue to take plain Chaulmoogra by mouth, so that the specific effect of the injection is difficult to assess. Details of treatment are shown in Table IV.

For the nerve pain accompanying acute reaction in Neural cases, injection of the ethyl esters of ndilo (*calophyllum inophyllum*) is still popular, as witness the nearly 300 injections voluntarily called for during the year. The oil has also been much in demand as an embrocation for painful parts.

The local injection of individual nodules by methylene blue has been continued and is of undoubted benefit in most cases. Very little general effect is observed however, and ordinary infiltrations and patches apparently fail to react.

TABLE IV.

1936.	Dressings.	Patients dressed.	Operations.	Injections.						Total of injections.	Laboratory Examinations.			Total of laboratory examinations.
				Salvarsan.	Dilesters.	Methylene blue.	Insulin.	Chaulmoogra oil.	Various other injections.		Bacteriological examinations.	Urine analyses.	Helminths.	
January ..	7,293	3,519	4	19	26	57	59	1,476	84	1,721	20	96	11	127
February .	6,987	3,468	..	8	31	76	45	1,641	28	1,829	24	92	11	127
March ..	7,538	3,582	..	29	38	85	22	1,622	28	1,824	115	96	3	214
April ..	7,382	3,740	..	14	23	51	12	1,024	2	1,126	8	88	29	125
May ..	6,732	3,434	..	3	7	84	5	1,484	188	1,771	22	96	18	136
June ..	8,172	3,942	..	20	32	48	34	1,807	29	1,970	15	102	17	134
July ..	7,497	3,247	1	24	22	44	46	2,184	23	2,343	40	105	20	165
August ..	7,542	3,618	2	20	14	47	50	1,704	20	1,855	9	97	9	115
September	6,613	3,196	..	7	32	27	34	2,024	13	2,137	32	82	..	114
October ..	8,874	3,726	..	22	31	56	48	1,191	34	1,382	109	76	23	208
November.	8,442	3,978	..	11	30	81	33	1,336	23	1,514	12	69	14	95
December	7,776	3,546	4	4	6	11	32	389	11	453	17	63	..	80
Total ..	90,848	42,996	11	181	292	667	420	17,882	483	19,925	423	1,062	155	1,640

Results of Treatment.

Having compared the relative proportions of the various stages of leprosy among Fijians and Indians—the only classes with sufficient numbers to justify comparison—it will be of interest to inquire if they fulfil the general rule as to prognosis given above. Reference to Table V will show that the Fijian figures give 5·0 per cent., 18·1 per cent., and 22·4 per cent of Arrested (=freedom from activity for two years or more), Quiescent (=freedom from activity for six months or more), and Improved cases, respectively, as against Indian percentages of 7·2, 21·3, and 39·0. If the total of improved cases in each class be taken, the Indian figures show 67·7 per cent. as contrasted with only 45·8 per cent for the Fijian. This discrepancy can be readily explained by the relatively large proportion of Advanced Cutaneous cases among the Fijians, the progress of whose disease can at the best be only retarded by any method of treatment so far in use.

TABLE V.—RACE RELATED TO PROGRESS.

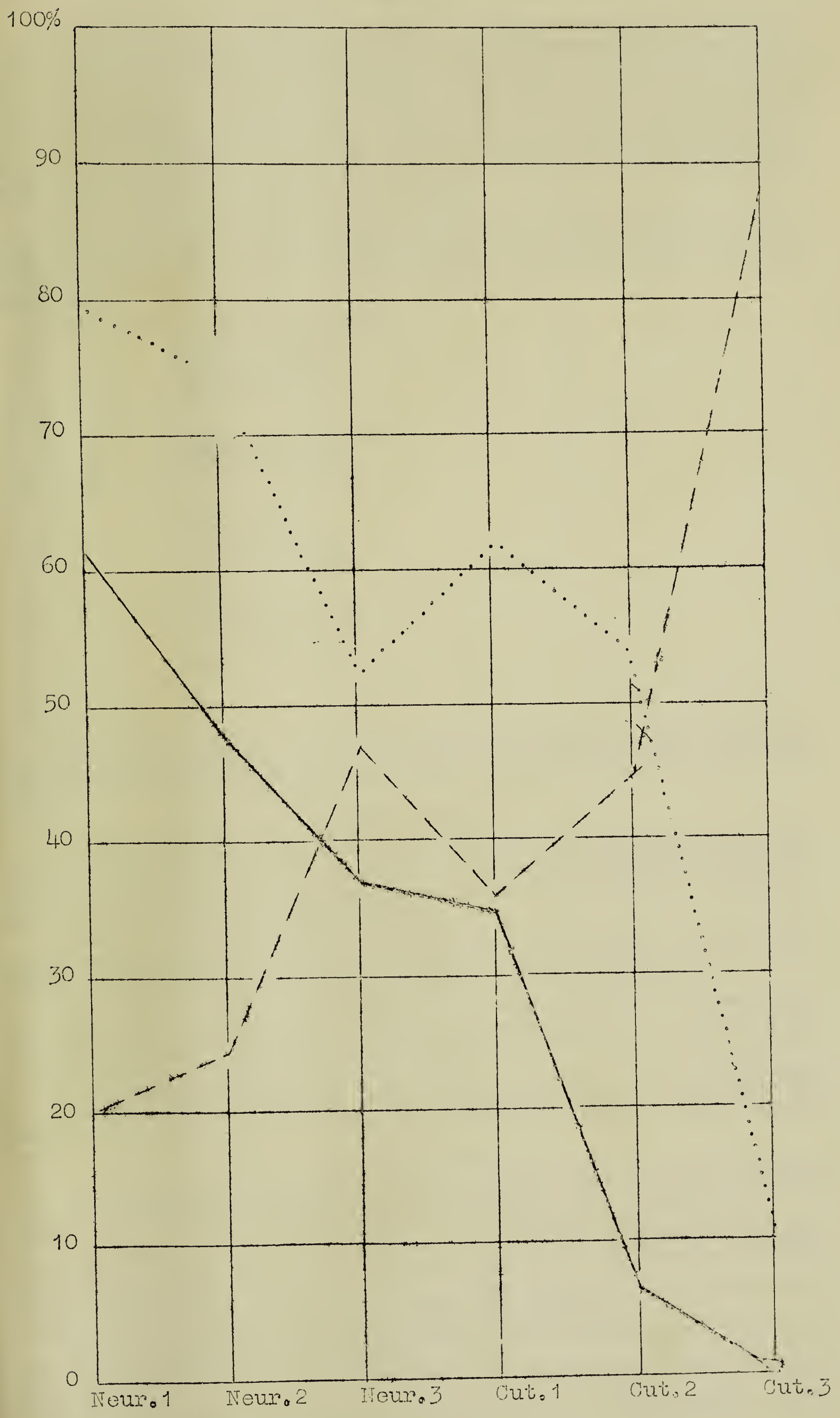
	Arrested.		Quiescent		Improved		Station-ary.		Worse.		Died.		Repatri-ated.			Total
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
European	..	..	..	..	2	..	1	..	..	..	..	..	..	..	3	..	3
Half-Caste	..	..	1	..	1	1	3	..	..	..	1	..	..	..	6	1	7
Fijian	6	1	15	10	22	9	32	14	10	2	13	4	..	..	98	40	138
Indian	14	2	33	14	64	22	34	7	6	1	12	5	6	..	169	51	220
Solomon	2	..	15	2	13	5	7	..	3	..	5	..	..	..	45	7	52
Rotuman	..	..	11	16	5	3	8	1	3	2	2	..	..	..	29	22	51
Cook Islanders ..	..	1	7	10	11	6	6	6	1	1	2	1	..	..	27	25	52
Gilbert Islanders ..	..	..	1	3	8	8	16	4	..	..	5	..	..	..	30	15	45
Samoan	..	..	..	..	5	..	4	3	1	2	2	1	..	..	12	6	18
Chinese	..	..	..	..	1	..	7	..	1	..	1	..	..	..	10	..	10
Tongan	1	1	..	1	3	4	3	1	..	1	..	..	..	..	7	8	15
Niue Islanders . ..	..	..	..	1	..	..	1	2	..	..	..	..	..	..	1	3	4
Maori	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	1
	23	5	83	57	135	58	123	38	25	9	43	11	6	..	438	178	616
Total ..	28		140		193		161		34		54		6		616		

Table VI, showing progress in relation to stage of the disease confirms the statement that Neural cases are likely to show better results than Cutaneous cases. Thus, of twenty-eight Arrested cases, twenty-one or 75 per cent. are Neural in type, and of one hundred and forty Quiescent cases, one hundred and three, (73·5 per cent.) are Neural. The Improvement column shows, however, a large proportion of Cutaneous cases, so that it is evident that while Cutaneous cases can be improved by modern treatment, comparatively few improve to the extent of "cure."

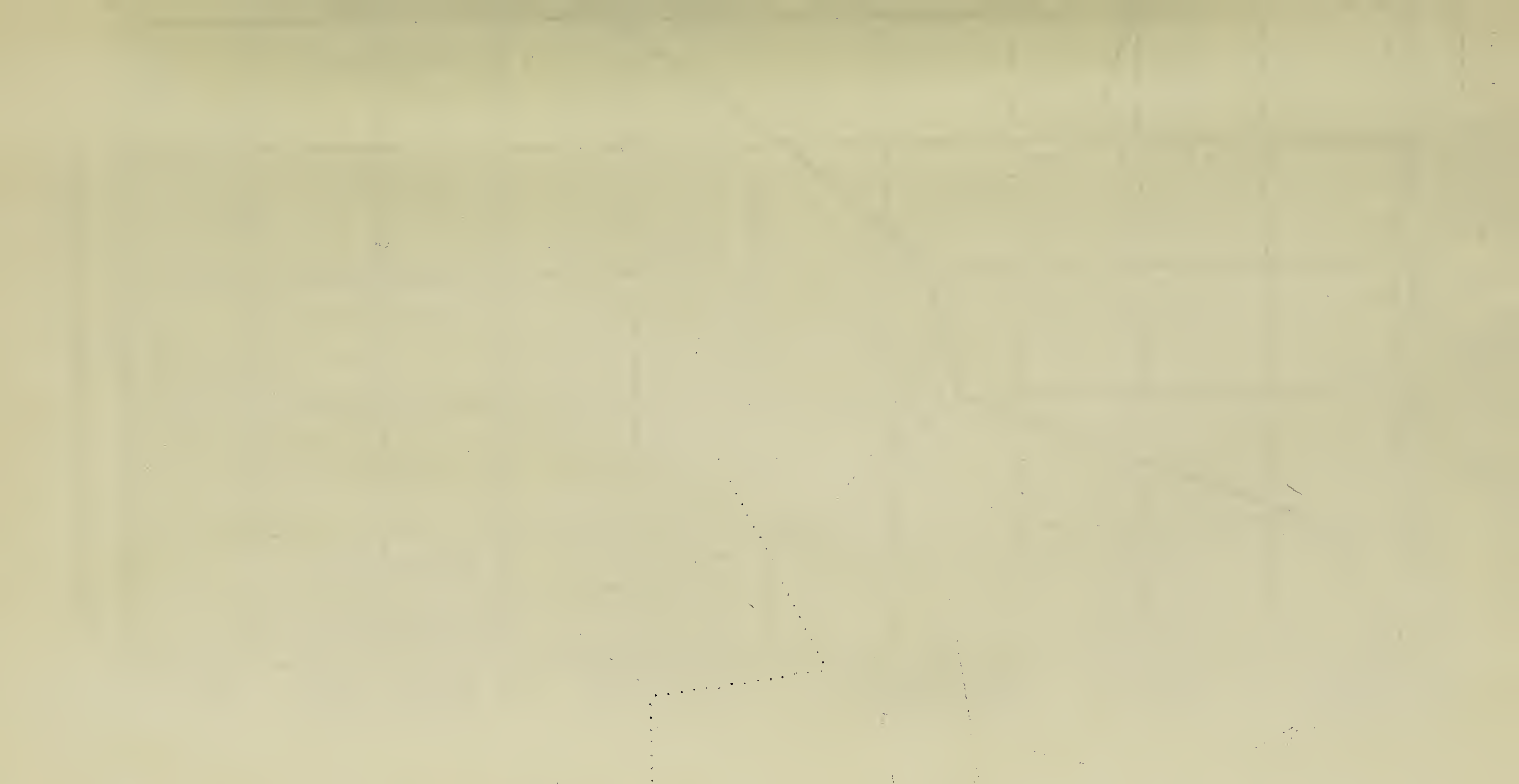
TABLE VI.—TYPE OF LEPROSY RELATED TO PROGRESS.

	Arrested.	Quiescent.	Improved.	Station-ary.	Worse.	Died.	Repatri-ated.	Total.
Neural 1	6	45	15	11	3	3	..	83
Neural 2	12	54	38	20	4	10	2	140
Neural 3	3	4	3	3	..	6	..	19
Cutaneous 1	2	22	19	17	7	2	..	69
Cutaneous 2	5	15	111	73	15	21	4	244
Cutaneous 3	..	..	7	37	5	12	..	61
Total ..	28	140	193	161	34	54	6	616

ILLUSTRATED PROGRESS IN VARIOUS TYPES.



——————— Percentage of Inactive Cases
. . . . . Percentage of Improved Cases.
— — — — — Percentage of Stationary or Worse Cases.



The possibility of sex influencing the incidence and prognosis of leprosy has often been debated. As regards incidence our figures show once again a preponderance of males in the ratio of 438 to 178 females, or 71.1 per cent. Of the males 33·8 per cent., and of the females 52·8 per cent. are Neural in type, so that, other things being equal, somewhat better results might be expected among women. We find, however (Table V) that 82·1 per cent. of the Arrested, 59·2 per cent. of the Quiescent, and 69·9 per cent. of the Improved cases are male, while only 33·2 per cent. of the total of Improved cases are female. This must be in part at least the result of the more sedentary occupations and generally restricted life of the female patients, for the smaller incidence among women negatives the possibility of a lesser resistence to leprosy in their sex, without the further assumption that they are less exposed to infection.

Deaths during 1936 numbered fifty-four, a larger number than for many years. It is however, inevitable in an institution such as Makongai that the death-rate should be fairly high, for the healthier type of patient is being steadily discharged and there must remain an accumulation of advanced and maimed cases. Forty-one of the deaths occurred in Cutaneous or Advanced Neural patients.

Certified causes of deaths were as follows:—

Leprotic " exhaustion "	23	
Septic absorption	7	
Nephritis or Uræmia	3	
Amyloid disease	1	
	—	34
Pulmonary tuberculosis	4	
Miliary tuberculosis	3	
Meningitic tuberculosis	1	
	—	8
Cardiac failure	5	
Aortic Aneurysm	1	
Coronary thrombosis	1	
Cerebral hæmorrhage	2	
	—	9
Epileptic insanity	1	
Disseminated sclerosis	1	
	—	2
Lobar pneumonia	1	
		1
		54

Thirty-four of these deaths may be fairly attributed to leprosy; eight to tuberculosis; nine to disease of the Circulatory System; two to disease of the Nervous System; one to disease of the Respiratory System. This shows a much higher proportion of deaths due to leprosy itself to those due tuberculosis than usual.

Public Works.

As already mentioned, full use of patients is made for the maintenance of existing buildings and in the construction of new ones. This is not only cheaper and more convenient than bringing non-patient labour into the area, but is regarded as an integral part of treatment. The exercise so provided, mainly in the open air, promotes the absorption of injected drugs, assists the appetite, improves sleep and prevents morbid introspection.

Owing to the increasing number of boy patients a second school dormitory was required, and the opportunity was taken of providing a much improved type of building. The same remark applies to the new ward for advanced cases in the men's section of the Hospital. New kitchens and bathrooms, badly needed, have also been provided in the Polynesian village.

Other works now under construction include an additional house to accommodate six Rotumans shortly expected to arrive; rebuilding of the cement ward for advanced cases in the women's compound; a new four-roomed building to relieve congestion in the Fijian village; and a similar building as an addition to the Indian " lines."

Arrangements are also in hand for the provision of a new electric plant with a Deisel engine at each end of the island. The ten-year old Delco engines have been heavily overburdened, and have naturally been giving trouble for some time, so that the new plant will supply a very real need.

Makongai Produce.

As already mentioned the produce of patients' gardens is bought for Hospital use at current rates, and during 1936 the patients received approximately £1,000 in this way. Many of the patients also rear poultry near their villages and sell birds and eggs among themselves.

The poultry-run for the Hospital itself is managed by a Native Sister under the superintendence of the Revd. Mother and over 10,000 eggs and 400 fowls were issued to the Hospital kitchen during the year.

Cattle are reared at Nasau and over 10 tons of beef and 4,000 gallons of milk were issued to patients. About 330 goats were issued to Indians in lieu of beef.

Bread is also produced at Nasau, more than 65,000 loaves being issued and 10,000 loaves sold, revenue benefiting to the extent of £220.

Five and a half tons of locally-produced soap were issued and surplus copra sold realised £250 for revenue.

The Chaulmoogra trees continue to flourish and about two gallons of oil were obtained. A number of new trees have been planted from local seed and appear to be doing well.

The patients' Co-operative Store shows a turnover of £2,697 for the year, and the Nasau Canteen, which works on a smaller scale, a turnover of £1,350. £122 3s. 11d., representing liquid profits from the latter, was credited to the Makongai Comforts Fund.

RAINFALL, 1936.

Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
14·12	4·45	4·52	2·09½	16·51	18·95	3·17½	2·64	1·90½	10·26	1·69½	5·19	85·51

As shown in the monthly rainfall table, the total rainfall for the year was satisfactory, but in the months with a fall of less than three inches, rationing was necessary in order to avoid shortage, and for two spells of a few weeks each, the only resort was pumped well water.

Visitors.

Official visitors during the year included His Excellency the Acting Governor and Mrs. Barton, accompanied by Lady Evelyn Drummond and Mr. H. C. Monckton, Secretary for Native Affairs; the Hon. Sir H. M. Scott, K.C.; Dr. A. H. B. Pearce, Director of Medical Services (on three occasions); Mr. A. A. Ragg, Acting Director of Public Works; Miss M. E. Tennant of the Rockefeller Foundation, New York; Miss Lambie, Director of Nursing, New Zealand Health Department; Miss Lea, Matron, Colonial War Memorial Hospital, Suva; Dr. de Labilliere, H.M.S. "Leith"; Dr. Clifford James, British Solomon Islands; Doctors Macpherson, Maxwell and Hoodless of the Fiji Medical Service; Mr. R. F. Pinder, Government Auditor; Mr. K. V. Macquire, District Commissioner, Savu Savu; Mr. C. R. Turbet, Senior Veterinary Officer, and others.

RESULTS OF VACCINATION WITH THE DRIED CALF LYMPH SUPPLIED BY THE PASTEUR INSTITUTE, JAVA.

By Dr. C. H. B. Thompson, Medical Officer of Health.

The following notes and table indicate the results of the vaccinations carried out with the dried calf lymph brought to the notice of the Medical department by Dr. de Rook, and kindly supplied by Dr. Otter of the Pasteur Institute, Bandoeng, Java.

2. The lymph contained in two thick glass capsules, each stated to be sufficient for 100 vaccinations, was received in November, 1935, and lay on my office table, on which the morning sun shines directly, till used in June of this year, a matter of over six months. This delay and exposure to local conditions was deliberate and intended as a test of the lymph under Fijian conditions.

3. A total of 359 vaccinations was effected with the available lymph, and it is estimated 400, or double the number of vaccinations officially recommended, could have been carried out—a point of some economic significance.

When the lymph is required for use the solid lymph from a capsule is ground up with 1½ cc. of glycerine.

Of the 359 vaccinations, 281 were performed as recommended within three days of the lymph being prepared for use (by grinding up with glycerine) and gave 260 positive results in the forms of primary or secondary (persons previously successfully vaccinated) takes or immune reactions; to these may be added 11 whose results are not known, leaving 10 unsuccessful, of the latter number five were secondary cases in which it is probable immune reactions were missed as these may be of a fleeting nature. If this be admitted it is a not an unreasonable assumption that the 281 vaccinations gave 276 positive results, that is, 98 per cent. positive reactions were obtained from this lymph. Assuming however that the 11 cases not seen were all negative, and the five secondaries recorded as unsuccessful were also actually unsuccessful, 281 gave 260 positives, *i.e.* the worst possible interpretation of the table shows 92·5 per cent. positives.

4. On the other hand, of 78 pupils at the Samambula Government Indian School vaccinated with lymph which had been prepared for use with glycerine four days previously a decidedly lower percentage of successful reactions was secured, the 78 only showing 48 reactions or 61·5 per cent. positives, thus supporting the official advice that this lymph should not be used after the third day.

5. Reference may be made to two other points—

(*a*) there appears to be a difference in the immune reactions given by this lymph as compared with the ordinary glycerinated lymph as in quite a number of secondary vaccinations a reaction commenced within the first 48 hours which from experience with the ordinary lymph were noted as immune reactions, which however instead of fading on or after the third day progressed to definite modified, or in some cases, well marked positive reactions;

(*b*) in the first batch of lymph prepared some of the solid lymph was unintentionally left in the capsule stem so that the lymph used in vaccinating the Girls' Grammar School was almost certainly not more than two-thirds of the official strength, yet the results obtained were little less favourable than those obtained with the full official strength.

If further supplies of the solid lymph are obtained for use in Fiji it is suggested this point be further investigated as it may prove possible to perform not double but three times the official number of vaccinations, officially recommended by the Java authorities, under the conditions obtaining in Fiji.

6. *Recommendations.*—In view of the above results it is recommended that the solid lymph supplied by the Pasteur Institute, Bandoeng, Java, be given an extended trial in Fiji and if the above favourable results are confirmed the new form of lymph be used in preference to that in normal use at present as being more efficient and economical.

It should be mentioned in this connection that in the districts that have come under my notice a further vaccination campaign against small-pox is definitely called for. In Namosi province there are probably five unvaccinated children for each one vaccinated. In the Suva area, outside the Suva schools and Fijian villages, there are very considerable numbers unprotected.

TABLE OF DRIED LYMPH VACCINATIONS.

School.	Date.	Successful.		Unsuccessful.		Immune	Not seen.	Total.
		Primy.	Secondy.	Primy.	Secondy.			
Girls' Grammar School ..	11/6/36	54	5	3	1	33	.	96
Boys' Grammar School ..	12/6/36	42	20		2	20	5	89
Convent	29/6/36	11	3	1	.	1	2	18
St. Anne's School	29/6/36	21	12*	.	1	3	4	41
Students, C. M. School ..	1/7/36	13	15†	1	1	7	.	37
	..	141	55	5	5	64	11	281
Samambula G. I. School ..	2/7/36	37	1	30‡	.	10	..	78
Totals ..	..	178	56	35	5	74	11	359

* St. Anne's School.—Eight of these 12 secondary successful vaccinations showed what appeared to be Immune reactions, which however went on to full takes.

† Central Medical School.—Ten out of the 15 vaccinations under Successful Secondary were modified takes; the intervals between previous successful vaccinations and present range from 17 to 3 years, and in some cases are unknown.

‡ Samambula G. I. School.—Twenty-eight of the 30 unsuccessful primary vaccinations were redone later successfully with ordinary calf lymph.

Thanks to the co-operation of the Head Mistress the most reliable information, in regard to previous successful vaccinations, checked in each instance by inspection by myself, and present results, was obtained from the Girls' Grammar School as below:—

	Immune reactions.								*Successful results.*				
After	11	10	9	8	7	6	4	years.	10	7	4	3	years.
Nos.	2	8	5	4	4	2	8		1	3	2	1	

RETURN OF DISEASES AND DEATHS AT THE COLONIAL WAR MEMORIAL HOSPITAL FOR THE YEAR 1936

Disease.	Admissions. Europeans.	Fijians.	Indians.	Others.	Total.	Deaths.
Acute Infectious Diseases.						
Typhoid	8	8	29	5	50	11
Dysentery Bacillary	5	53	62	9	129	14
Dysentery Amœbic	..	1	1	3	5	..
Measles	6	16	5	21	48	..
Pertussis	..	1	2	2	5	1
Diphtheria	11	2	3	3	19	1
Influenza	4	54	27	20	105	..
Mumps	9	19	6	8	42	..
Encephalitis	1	..	..		1	..
Meningococcal Meningitis	..	1	..	..	1	1
Chicken-pox Varicella	1	1	2	..	4	..
Cow-pox Vaccinia	..	..	1	..	1	..
Tetanus	..	3	1	..	4	2
Acute Coryza	..	2	1	..	3	..
Sapræmia, Septicæmia, Pyæmia	..	4	4	3	11	8
Dengue	..	..	1	..	1	..
Rheumatic Fever, Acute and Subacute Rheumatism	1	9	18	4	32	2
Glandular Fever	..	..	1	..	1	1
Framboesia Yaws	..	7	2	1	10	..
Leprosy	..	11	22	2	35	1
Other Infectious Diseases	1	1	..		2	..
Total	47	193	188	81	509	42
Tubercular and Venereal Diseases.						
T.B. Meningitis	..	1	2	..	3	1
Pulmonary Tuberculosis	4	28	21	5	58	18
T.B. of Bones, Joints, &c.	..	3	1	1	5	2
T.B. of Lymph. Glands	1	4	1	1	7	..
Other forms of T.B.	1	3	..	2	6	
Secondary Syphilis	1	..	1	..	2	..
Tertiary Syphilis	1	..	2	..	3	..
Late Syphilitic Manifestation	..	..	1	..	1	1
Acute Gonococcal Infections	2	1	12	2	17	..
Chronic Gonococcal Infections	2	..	3	..	5	..
Total	12	40	44	11	107	22
Benign Tumours and Cysts.						
Lipoma	..	1	..	..	1	..
Fibroma	..	1	..	1	2	..
Adenoma	1	..	..	..	1	..
Sebaceous Cysts	..	1	..	1	2	..
Ganglion	..	..	1	..	1	1
Other types of Benign Tumours or Cysts	5	..	5	1	11	..
Total	6	3	6	3	18	1
Malignant Diseases.						
Rodent Ulcer	8	..	..	..	8	..
Epithelioma of Skin	4	1	1	..	6	..
Carcinoma of—						
Tongue	..	1	..	..	1	..
Oesophagus	..	..	1	..	1	..
Stomach	..	1	1	..	2	2
Gallbladder	1	..	3	..	4	2
Uterus	1	1	3	1	6	3
Other Organs	3	..	7	1	11	1
Lymphosarcoma	..	1	..	..	1	1
Other types of Sarcoma	..	1	1	..	2	..
Total	17	6	17	2	42	9
Diseases of Metabolism and Endocrine Organs.						
Diabetes Mellitus	5	2	11	1	19	..
Gout	1	..	..	..	1	..
Goitre	..	..	5	1	6	..
Goitre Toxic, Exothalmic	..	..	1	..	1	1
Other Endoctrine disorders	..	..	1	..	1	..
Rickets	..	..	1	..	1	..
Pellagra	..	..	1	..	1	..
Total	6	2	20	2	30	1

Disease.	Admissions. Europeans.	Fijians.	Indians.	Others.	Total.	Deaths.
Diseases of Blood and Lymphatic System and Chronic Intoxications.						
Primary Anæmia	..	..	9	..	9	1
Secondary Anæmia	..	..	9	1	10	..
Other Types of Anæmia	..	1	2	..	3	..
Hæmophilia	..	1	1	..	2	1
Lymphadenoma, Hodgkin's disease	..	1	..	..	1	..
Filariasis	2	5	..	1	8	..
Lymphangitis and Lymphadenitis	..	2	..	..	2	2
Chronic Metallic and Drug Intoxications	..	..	2	..	2	..
Total	2	10	23	2	37	4
Diseases of Nervous System.						
Peripheral Neuritis	..	..	2	..	2	..
Other forms of Neuritis, Neuralgia	..	..	1	..	1	..
Disseminated Sclerosis	..	..	..	2	2	..
General Paralysis of the Insane	1	..	..	..	1	..
Meningitis	..	..	1	..	1	..
Hæmorrhage, Thrombosis and Embolism	2	2	1	1	6	5
Cerebral Abscess	..	..	1	..	1	1
Paralysis Agitans	2	..	..	1	3	..
Chorea	..	..	..	1	1	..
Epilepsy	..	3	..	..	3	..
Hysteria, Neurasthenia	..	..	2	..	2	..
Insanity, Idiocy	1	..	1	..	2	..
Other Diseases of the Nervous System	3	..	..	..	3	..
Hemiplegia	..	..	4	1	5	1
Total	9	5	13	6	33	7
Circulatory System.						
Abnormalities of the Cardiac Rythm	..	1	2	..	3	..
Acute Endocarditis and Myocarditis	2	1	2	1	6	4
Myocardial Degeneration	7	3	15	1	26	16
Chronic Valvular Disease of the Heart	..	..	3	1	4	4
Congenital Heart Disease	..	1	3	1	5	3
Angina Pectoris	2	..	..	..	2	..
Arteriosclerosis	1	..	1	..	2	2
Hyperpiesia	9	..	..	..	9	..
Phlebitis Thrombosis and Embolism	1	1	4	1	7	4
Varicose Veins	2	..	..	1	3	..
Total	24	7	30	6	67	33
Respiratory System.						
Bronchitis Acute	3	6	6	1	16	..
Bronchitis Chronic	5	3	8	4	20	1
Bronchiectasis	..	1	1	1	3	..
Asthma	1	3	27	..	31	6
Emphysema	..	..	..	1	1	..
Pneumonia Lobar	2	27	20	14	63	25
,, Broncho	..	25	23	13	61	18
,, Hypostatic	..	2	..	..	2	2
Pleurisy Dry	..	1	..	..	1	..
Pleurisy with Effusion	..	5	1	..	6	..
Empyema	..	..	..	1	1	..
Other Diseases of the Respiratory System	..	..	..	1	1	1
Total	11	73	86	36	206	53

RETURN OF DISEASES AND DEATHS AT THE COLONIAL WAR MEMORIAL HOSPITAL FOR THE YEAR 1936.—*continued.*

Disease.	Admissions. Europeans.	Fijians.	Indians.	Others.	Total.	Deaths.
Alimentary System.						
Teeth and Gums	25	9	14	10	58	..
Dyspepsia	..	2	4	..	6	..
Acute Gastritis	1	2	2	..	5	..
Peptic Ulcer Gastric	1	..	5	3	9	1
Peptic Ulcer Duodenal	4	1	5	..	10	..
Perforated Peptic Ulcer	..	..	1	..	1	1
Constipation	..	3	5	1	9	..
Diarrhœa	3	23	16	1	43	..
Enteritis Gastro-enteritis	3	..	2	1	6	..
Food Poisoning	..	8	..	2	10	..
Foreign Bodies in Stomach or Intestines	..	1	..	..	1	..
Colitis	..	..	1	..	1	..
Diverticulosis and Diverticulitis	1				1	
Intestinal Parasites	1	6	18	..	25	..
Perineal & Ischiorectal Abscess	1	..	5	..	6	..
Anal Fissure, Fistula	1	..	..	..	1	..
Hæmorrhoids and Rectal Prolapse	2	1	9	5	17	..
Amœbic Hepatitis and Hepatic Abscess	1	..	1	..	2	..
Catarrhal Jaundice	1	2	1	..	4	1
Cirrhosis of Liver	3	1	6	..	10	3
Cholecystitis, Cholangitis	6	..	6	1	13	..
Cholelithiasis	1	..	..	..	1	..
Other diseases of the Alimentary System	1	1	2	..	4	..
Total	56	60	103	24	243	6
Appendix and Peritoneum.						
Appendix Chronic & Recurrent	15	3	8	11	37	..
Appendicitis Subacute	2	..	5	2	9	..
,, Simple acute	5	1	2	3	11	..
,, With Localised abscess	1	..	1	..	2	..
Acute Peritonitis	..	..	1	..	1	1
Total	23	4	17	16	60	1
Hernia.						
Inguinal, Oblique or Indirect	6	3	1	2	12	..
Inguinal Direct	1	3	3	3	10	..
Femoral Hernia	1	1	1	..	3	..
Umbilical Hernia	..	..	1	..	1	..
Strangulated Hernia	..	1	2	1	4	1
Total	8	8	8	6	30	1
Diseases of Urinary System.						
Acute Nephritis	..	2	1	..	3	..
Chronic Nephritis	2	1	5	..	8	5
Pyelitis	3	1	3	1	8	..
Urinary Calculi Renal	1	..	..	..	1	..
Urinary Calculi Ureteric	..	..	1	..	1	..
Urethral Stricture	1	..	..	..	1	..
Other diseases Urinary System	1	..	..	1	2	..
Cystitis Acute	1	..	3	..	4	..
Total	9	4	13	2	28	5
Diseases of Male Organs.						
Phimosis and Pharaphimosis	..	..	..	3	3	..
Impotence and Sterility	..	..	..	1	1	..
Hydrocele	..	3	3	..	6	..
Varicocele	..	2	..	..	2	..
Epididymitis and Orchitis	..	1	4	2	7	..
Ectopia Testis	..	..	..	1	1	..
Enlarged Prostrate Gland	7	1	..	..	8	1
Elephantiasis of Scrotum	..	3	..	1	4	..
Total	7	10	7	8	32	1

Disease.	Admissions. Europeans.	Fijians.	Indians.	Others.	Total.	Deaths.
Diseases of Pregnancy, Labour & the Puerperium.						
Normal pregnancy	..	4	25	..	29	..
Normal labour	..	91	100	38	229	..
Threatened abortion	2	3	8	2	15	..
Abortion or miscarriage	9	2	3	5	19	..
Extra uterine pregnancy	1	..	..	..	1	..
Accidental hæmorrhage	..	1	1	..	2	..
Placenta prævia	..	..	1	..	1	..
Other diseases occurring during pregnancy	..	1	12	1	14	1
Still-born	..	1	6	3	10	10
Retained placenta	..	..	1	..	1	1
Puerperal sepsis	..	1	6	1	8	2
Puerperal insanity	..	1	1	..	2	..
Total	12	105	164	50	331	14
Diseases of Women.						
Disorders of menstruation	..	..	1	..	1	..
Pruritis vulvæ	1	..	..	..	1	..
Retroversion of uterus	1	1	5	..	7	..
Cystocele and rectocele	1	..	..	..	1	..
Uterine prolapse	5	..	2	..	7	..
Infections of vulva and vagina	..	1	2	1	4	..
Chronic endometritis and endocervicitis	2	..	4	4	10	..
Chronic metritis, fibrosis uteri	5	..	1	..	6	..
Salpingitis and orphoritis except tuberculosis	2	4	12	3	21	1
Pelvic cellulitis and parametritis	..	2	1	1	4	..
Benign ovarian tumours & cysts	1	..	1	..	2	..
Other lesions of vulva & vagina	2	..	..	..	2	..
Total	20	8	29	9	66	1
Diseases of the Breast.						
Acute mastitis, breast abscess	1	..	4	..	5	..
Chronic interstitial mastitis	1	..	..	..	1	..
Benign tumours and cysts of breast	1	..	..	1	2	..
Total	3	..	4	1	8	..
Diseases of New-Born Infancy, Early Childhood.						
Asphyxia Neonatorum	..	1	2	..	3	2
Harelip and cleft palate	..	1	..	..	1	..
Other congenital malformations	2	..	..	1	3	..
Prematurity	..	1	7	..	8	8
Malnutrition and marasmus	..	3	1	..	4	2
Infantile convulsions	..	4	..	..	4	2
Born in hospital	..	91	100	38	229	..
Admitted with mother not ill	..	2	5	..	7	..
Other diseases of infancy	..	..	1	..	1	..
Total	2	103	116	39	260	14
Diseases of Joints, Muscles and Tendons.						
Acute Osteomyelitis	..	2	..	1	3	..
Chronic relapsing Osteomyelitis	..	4	..	..	4	..
Periostitis	1	1	..	..	2	..
Benign Tumours of Bone	1	..	..	..	1	..
Other Bone diseases	..	..	1	..	1	..
Synovitis	..	4	..	..	4	..
Acute Arthritis	1	1	4	1	7	1
Chronic Arthirtis, Osteoarthritis and Rheumatoid Arthritis	1	10	13	5	29	2
Loose bodies in joints	..	1	..	..	1	..
Fibrositis and Myositis	..	..	1	..	1	..
Bursitis	1	..	..	..	1	..
Ingrowing toe-nail	3	..	..	..	3	..
Postural deformities	1	..	..	2	3	..
Lumbago	..	..	1	..	1	..
Total	9	23	20	9	61	3

RETURN OF DISEASES AND DEATHS AT THE COLONIAL WAR MEMORIAL HOSPITAL FOR THE YEAR 1936.—*continued.*

Disease.	Admissions. Europeans.	Fijians.	Indians.	Others.	Total.	Deaths.
AFFECTIONS DUE TO EXTERNAL CAUSES.						
Poisoning other than food poisoning	1	1	1	1	4	..
Burns and scalds	2	6	11	6	25	2
Bruises, abrasions, contusions	4	28	27	13	72	..
Wounds incised, puncured or contused and lacerated	10	14	43	13	80	..
Septic wounds	18	36	26	11	91	..
Embedded foreign bodies	2	..	2	3	7	..
Scalp wounds	5	6	3	..	14	..
Insect bites	..	1	..	1	2	..
Shock following injuries	..	..	1	..	1	1
Injuries to muscles, tendons and ligaments	1	1	..	..	2	..
Sprains of joints	..	3	..	1	4	..
Dislocation of joints	1	1	..	..	2	..
Head injuries, cerebral concussion	..	1	..	..	1	..
Injuries to Spine and Back	1	..	1	..	2	..
Infection of the hands	..	1	..	..	1	..
Fracture of—						
Jaw and facial bones	..	2	2	1	5	..
Skull	1	..	..	..	1	1
Spinal column	..	2	..	..	2	..
Ribs	..	..	3	..	3	..
Clavicle	2	2	..	..	4	..
Scapula	1	..	..	..	1	..
Radius	3	2	1	..	6	..
Ulna	..	..	..	1	1	..
Radius and ulna	2	2	1	1	6	..
Carpus, metacarpus and Phalanges	1	..	..	..	1	..
Femur	2	1	2	..	5	..
Tibia	..	1	1	1	3	..
Fibula	2	2	1	..	5	..
Tibia and Fibula	2	3	1	1	7	..
Tarsus, metatarsus and Phalanges	..	1	..	1	2	..
Separation of Epiphysis	..	1	1	..	2	..
Total	61	118	128	55	362	4
DISEASES OF THE SKIN.						
Furunculosis	1	..	..	..	1	..
Carbuncle	2	2	2	2	8	1
Abscess	2	27	23	7	59	..
Cellulitis	5	3	6	3	17	..
Erysipelas	2	1	..	..	3	..
Eczema	1	..	3	..	4	..
Dermatitis	..	2	4	..	6	2
Scabies	3	6	1	4	14	..
Ringworm	..	..	1	..	1	..
Ulcers	2	8	11	3	24	..
Gangrene	..	1	4	..	5	1
Other Skin diseases	5	4	6	3	18	..
Total	23	54	61	22	160	4

Disease.	Admissions. Europeans.	Fijians.	Indians.	Others.	Total.	Deaths.
DISEASES OF THE EYE.						
Conjunctivitis	..	5	3	1	9	..
Trachoma	..	1	..	..	1	..
Pterygium	..	6	5	..	11	..
Keratitis	..	..	4	..	4	..
Iritis	..	..	1	..	1	..
Cataract	..	2	3	..	5	..
Corneal ulcer and sequelæ	..	2	3	2	7	..
Optic atrophy secondary	..	..	..	1	1	..
Injury to the eye	..	3	5	1	9	..
Foreign body in the eye	..	..	2	..	2	..
Diseases of the lids	..	4	..	..	4	..
Dacryocystitis	..	1	1	..	2	..
Other diseases of the eye	2	8	4	2	16	..
Total	2	32	31	7	72	..
DISEASES OF EAR, NOSE AND THROAT.						
Foreign body in ear	..	..	2	..	2	..
Acute otitis media	5	2	4	..	11	..
Mastoiditis	..	1	1	..	2	..
Chronic otitis media	..	1	3	..	4	..
Deflected nasal septum	2	..	1	..	3	..
Nasal Polypi	..	2	1	..	3	..
Maillary sinusitis	4	1	..	..	5	..
Frontal sinusitis	1	..	1	..	2	..
Pharyngitis	2	..	..	1	3	..
Acute tonsilitis	9	4	6	2	21	..
Enlarged tonsils and adenoids	15	2	2	5	24	..
Laryngitis	3	..	1	2	6	..
Peri-tonsillar abscess Quinsy	..	1	..	..	1	..
Parasites in ear or throat	..	..	1	..	1	..
Total	41	14	23	10	88	..
Ill-DEFINED DISEASES.						
Admitted for observation or investigation	34	37	64	17	152	..
Orphans	..	12	..	1	13	..
Parent admitted with child not ill	1	10	18	14	43	..
Other ill-defined diseases	..	1	..	..	1	..
Debility	2	1	7	..	10	..
Senility	..	2	3	..	5	2
Total	37	63	92	32	224	2

SURGICAL OPERATIONS PERFORMED AT THE COLONIAL WAR MEMORIAL HOSPITAL DURING THE YEAR 1936.

	No.
Blood Vessels—	
Phlebotomy	11
Blood transfusion	10
Injections for Varicose Veins	2
Venesection	10
Muscle, Bursæ, Tendons and Nerves—	
Suturing of tendons	3
Suturing of musculo-spiral nerve	1
Lengthening of tendons	3
Excision of bursa of knee	1
Excision of bursa of elbow	1
Exploration of cut tendon	1
Bones—	
(*a*) Spine—	
Lumbar puncture	16
(*b*) Fractures—	
Application of plasters	96
Application of splints	35
Application of extensions	17
Reduction of fractures	3
Reduction of fractures and setting under general anæsthetic	12
Removal of plasters	10
Removal of sequestrum of jaw	1
Pegging of ulna and radius	2
Pegging of femur	1
Manipulation of fractures	2
Osteo-myelitis of humerus	1
Plating of radius	1
Bone graft	1
(*c*) Amputations of—	
Finger	4
Toe	4
Leg	4
Coccyx	1
Foot (Symes')	2
Arm	1
Joints—	
Aspiration of knee-joint	12
Manipulation of joints	6
Reduction of dislocation of shoulder	1
Lymphatic System—	
Excision of glands of neck	4
Excision of inguinal gland	1
Partial thyroidectomy	2
Bilateral thyroidectomy	1
Exploration of iliac gland masses	1
Alimentary System—	
Mouth, tongue and lips—	
Teeth extractions	343
Severing of tongue-tie	1
Stomach and Intestines—	
Paracentesis Abdominis	43
Appendectomy	56
Laparotomy	3
Gastro-enterostomy	3
Drainage of appendix abscess	2
Drainage of peritoneal cavity	1
Freeing of omental adhesions	1
Jejuno-duodenostomy	1
Herniæ—	
Inguinal, radical cure	26
Relief of strangulated hernia	1
Liver, Gall-Bladder, Spleen and Pancreas.	
Splenectomy	1
Cholecystectomy	1
Rectum and Anus—	
Excision of hæmorrhoids	10
Incision of peri-anal abscess	5
Carbolic injections for hæmorrhoids	7
Sigmoidoscopy	12
Packing of Fistula-in-ano	3
Radical cure of imperforate anus	1
Urinary System—	
Aspiration of bladder	1
Insertion of catheter	4
Cystoscopy	10
Wheelhouse's operation	1
Nephrectomy	1
Male Genital Organs—	
Circumcision	47
Radical cure of hydrocele	8
Excision of testicle	2
Orchidopexy	2
Amputation of scrotum	2
Arrest of scrotal hæmorrhage	1
Radical cure of varicocele	1
Prostatectomy	1
Torek's operation	2
Gynæcological —	
Vulva—	
Excision of Bartholin's cyst	1
Colpotomy	2
Perineorraphy	1
Vaginal—	
Insertion of pessary	2
Uterus—	
Uterine curettage	18
Cæsarean section	2
Hysterectomy—total	5
sub-total	3
Drainage of pelvic abscess	4
Surgical induction of labour	3
Excision of cyst of broad ligament	1
Ovaries and Tubes—	
Salpingectomy	3
Drainage of pyopsalpinx	3
Foetus—	
Craniotomy	1
Breast—	
Incision of abscess	3
Excision of tumour	1
Thorax—	
Paracentesis thoracis	10
Aspiration of chest	3
Pneumothorax	2
Bronchoscopy	2
Drainage of empyema	2
Exploration for broken needle	1
Eye—	
Pterygium	10
Needling of lens	2
Entropion	21
Paracentesis	0
Iridectomy	1
Enucleation	1
Excision of growth	2
Ear, Nose and Throat—	
Antrum lavage	31
Tonsillectomy	29
Tonsillectomy by dissection	3
Exploration of maxillary sinus	2
Removal of aural polypi	1
Removal of nasal polypi	1
Adenoidectomy	7
Exploration of frontal sinus	1
Syringing of ears	2
Opening of sphenoid-ethmoid bones	1
Incision peritonsillar abscess	1
Mastoidectomy	3
Puncture of maxillary antrum	2
Sub-mucous resection	1
Plastic operation on nose	2
Skin Grafts—	
Pedicle graft	5
Skin graft	3
Skin—	
Removal of toe nail	9
Removal of finger nail	2
Areas sutured	178
Clips inserted in forehead	3
Clips inserted in thumb	1
Excision of rodent ulcer	4
Suturing of hair-lip	2
Removal of sebaceous cyst	1
Septic areas Incised	339

SURGICAL OPERATIONS PERFORMED AT THE COLONIAL WAR MEMORIAL HOSPITAL DURING THE YEAR 1936—*continued.*

New Growths—

Removal of cyst	13
Removal of melanoma	1
Removal of lipoma	4
Removal of papilloma	1

General—

Diathermy (medical and surgical)	84
Applications of radium	18
Exploration elbow joint	1
Exploration thigh	5
Exploration shoulder swelling	3
Exploration stump	1
Aspiration of swelling of neck	1
Breaking down adhesions	1
Repair crushed hand	1
Excision of scar tissue	4
Kondoleon's operation	1

Foreign bodies—

Extracted from—

Eye	5
Toe	3
Thigh	1
Finger	3
Nose	2
Hand	4
Foot	2
Ear	5
Knee	1
Arm	2
Leg	1
Grant total	1,801

Anæsthetics—

General (chloroform and ether and ethyl chloride and ether)	462
Local	209
Spinal	50
Evipan	75
Rectal	20
Total	816

LIST OF OPERATIONS ON IN-PATIENTS AT LAUTOKA HOSPITAL DURING THE YEAR 1936.

Partial thyroidectomy	1
Excision Epithelioma lip	1
Excision T.B. glands of neack	1
Excision parotid tumour	1
Mastoidectomy	2
Exploratory puncture maxillary antrum	3
Removal of tonsils and adenoids	34
Removal of nasal polypus	1
Dilating and scraping lacrymal sinus	1
Excision pterygium	6
Extraction of cataract	17
Enucleation eyeball	7
Lid splitting and grafting	4
Iridectomy	3
Needling capsule	1
Resection rib for drainage	9
Aspiration chest	8
Amputation of breast	1
Excision lipoma back	1
Excision papilloma	2
Excision osteochondroma of scapula	1
Radical cure inguinal hernia	31
Radical cure umbilical hernia	2
Radical cure femoral hernia	1
Various laparotomies	6
Closure perforated duodenal ulcer	1
Drainage subphrenic abscess	2
Subtotal gastrectomy	1
Gastro enterostomy	4
Appendicectomy	25
Cholecystectomy	3
Cholecystestomy	1
Radical cure hydrocele	21
Hæmorrhoidectomy	36
Circumcision	17
Paracentesis abdominis	30
Dilation urethral stricture	28
Incision ischio rectal abscess	1
Suprapubic cystotomy	1
Epididymectomy	1
Orchidectomy	1
Ligature posterior tibial artery	1
Ligature anterior tibial artery	2
Ligature ulnar artery	1
Exposure femoral artery	2
Injection varicose veins	3
Lumbar puncture	1
Tapping hydrocele	9
Stretching sciatic nerve	1
Suture flexor tendon leg and post tibial nerve	1
Division plantar fascia	1
Lengthening tendo achilles	2
Cleansing and spraying burns	1
Aspiration knee joint	4
Aspiration shoulder joint	1
Open reduction compound fracture of leg	3
Reduction dislocation of shoulder	3
Reduction fracture ulna	2
Manipulation of club feet	2
Plating fracture of femur	1
Plating fracture of tibia	1
Removal of bone	2
Kondoleon's operation	3
Excision sebaceous cyst	6
Excision nail	1
Removal of foreign body from hand	8
Removal of foreign body from eye	2
Removal of foreign body from ear	1
Amputation of toe	5
Amputation through metatarsals	1
Amputation through thigh	6
Amputation of fingers	3
Amputation of leg	4
Amputation of arm	2
Other procedures, incisions manipulations, &c	497
	901

In addition to the above, there were 469 extractions of teeth and 538 intravenous injections.

TABLE SHOWING NUMBER AND CAUSES OF ADMISSION AND DEATHS AT LAUTOKA HOSPITAL, LEVUKA HOSPITAL, PROVINCIAL HOSPITALS, PLANTATION HOSPITALS, AND SUVA GAOL INFIRMARY.

Disease.	Lautoka.		Levuka.		Rewa.		Mba.		Na'onga.		Ta'uni.		Savusavu.		Ra.		Tholo East.		Ma'uata.		Mbua.		Ka'avu.		Rotuma.		Lomaloma.		Suva Gaol.		Ra'wai Plant.		Nandi.		Penang.		Total.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
GENERAL DISEASES.																																				
Mumps	2	..	3	..	..	..	..	..	1	..	17	..	..	..	..	..	..	..	3	..	13	..	4	..	..	..	1	..	..	..	..	..	14	..	..	..	58	..
Chicken-pox	..	..	2	..	2	..	4	..	..	..	2	..	..	..	..	..	..	..	1	..	..	..	6	..	..	..	..	..	..	..	1	..	..	..	..	..	18	..
Diphtheria	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	..
Pertusis	..	..	..	..	2	..	..	..	..	..	..	..	..	..	3	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	1
Influenza	37	..	12	..	12	..	36	..	1	..	65	..	10	..	8	..	10	..	41	..	15	..	5	..	17	..	18	..	4	..	69	..	21	..	16	..	397	..
Measles	3	..	7	..	4	..	21	..	..	..	1	..	2	..	3	..	7	..	53	..	3	..	10	1	..	..	25	..	..	..	23	..	9	..	18	..	189	1
Enteric Fever	12	1	20	3	23	1	9	2	2	..	15	..	..	..	..	..	..	..	16	3	..	..	..	..	..	..	..	..	..	..	15	1	13	5	6	1	131	17
Dysentery	110	11	3	..	98	17	91	..	91	16	21	1	3	..	98	22	162	29	33	1	1	..	..	..	..	..	42	2	3	..	24	1	224	30	33	4	1037	134
Pneumonia	53	20	22	6	17	8	48	8		..	25	9	5	2	8	3	4	2	14	7	12	3	2	2	3	3	7	2	1	..	17	6	38	11	7	2	283	94
Gonorrhœa	43	..	..	..	..	..	8	..	..	..	2	..	..	..	2	..	..	..	13	..	..	..	2	..	..	..	1	..	2	..	5	..	16	..	3	..	97	..
Septicæmia	32	9	..	..	4	4	..	..	2	..	3	3	..	..	1	1	..	..	12	1	..	..	..	..	..	..	..	..	..	..	..	..	4	1	1	..	59	19
Tetanus	4	1	..	..	1	1	..	..	1	1	1	1	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	9	6
Tuberculosis	51	8	13	6	19	6	10	2	14	3	6	2	4	3	1	..	2	1	10	2	2	..	4	..	9	..	1	..	2	..	8	1	19	3	5	1	180	38
Yaws	4	..	..	..	20	..	10	..	1	..	8	..	4	..	15	..	7	..	1	..	14	..	41	..	13	..	7	..	..	..	..	..	3	..	1	..	149	..
Syphilis	7	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	9	2	..	..	..	..	..	..	..	..	..	..	..	..	4	..	..	..	20	3
Leprosy	9	1	1	..	..	..	..	..	7	..	1	..	5	..	1	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	4	..	30	1
Anæmia	127	4	1	..	..	..	..	..	5	3	1	1	..	..	..	..	..	..	8	3	1	..	..	..	..	..	3	..	7	..	8	..	4	..	1	..	166	11
Pyæmia	2	2	..	..	..	..	1	..	..	..	..	..	..	..	..	..	8	..	1	1	..	..	..	..	14	2	..	..	3	..	1	1	..	..	..	..	30	6
Rheumatism	4	..	3	..	2	..	1	..	9	..	2	..	19	..	1	..	2	..	7	..	2	1	4	..	4	..	..	..	..	..	18	..	19	..	7	..	104	1
New Growths	40	5	2	..	7	2	..	..	3	..	..	..	..	..	3	..	..	..	3	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	5	..	65	7
Erysipelas	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1
Diabetes	35	2	3	..	..	..	..	..	4	..	..	..	4	..	1	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	2	1	6	1	..	..	57	4
Malaria	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
Dengue	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	..	..	..	..	..	..	..	..	..	..	..	5	..
Debility	9	1	6	..	23	1	3	..	4	..	5	..	4	1	2	..	2	..	9	..	2	..	1	..	..	..	4	..	1	..	6	1	6	..	2	..	89	4
LOCAL DISEASES.																																				
Diseases of—																																				
Nervous System	35	4	2	..	6	1	3	..	13	..	14	2	3	..	1	..	7	1	17	1	2	..	3	..	5	4	2	..	..	..	6	2	23	10	5	..	147	25
Eye	67	..	3	..	1	..	2	..	6	..	15	..	1	..	3	..	2	..	16	..	1	..	9	..	1	..	8	..	..	..	10	..	9	..	10	..	164	..
Ear	8	..	..	..	3	..	1	..	1	..	1	..	..	..	1	..	..	..	1	..	..	..	3	..	2	..	3	..	..	..	2	..	6	..	..	..	32	..
Nose	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	4	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	7	..
Circulatory System	33	10	2	2	8	1	1	..	16	5	4	..	..	..	1	..	3	1	15	2	4	..	1	..	..	..	1	1	4	..	8	2	11	7	5	1	117	32
Respiratory System	137	6	25	1	45	13	11		29	5	18	..	..	..	12	..	8	..	5	4	10	1	5	..	10	..	57	1	1	..	14	2	14	..	10	1	411	34
Digestive System	215	9	29	4	39	3	15	..	27	2	25	..	3	..	9	..	9	..	112	2	13	..	8	1	7	1	7	..	5	..	39	..	64	2	17	1	643	25
Lymphatic System	10	..	5	..	28	..	11	..	1	..	49	..	..	..	1	..	2	..	4	..	..	..	2	..	2	..	2	..	1	..	5	..	2	..	2	..	127	..
Urinary System	32	6	2	1	4	2	2	..	7	..	3	..	3	..	2	..	3	1	14	1	3	..	..	..	1	1	1	..	18	..	10	..	..	..	105	12		
Male Organs	59	1	11	..	3	..	2	..	3	..	14	1	..	..	..	..	..	..	2	..	6	..	..	..	2	..	2	..	2	..	12	..	7	..	3	..	126	2
Female Organs	136	1	5	..	10	..	8	..	6	1	16	..	..	..	..	..	..	..	7	..	15	..	..	..	18	2	3	..	..	..	..	..	6	..	7	..	237	4
Organs Locomotion	47	..	8	..	1	..	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	7	..	1	..	67	..		
Cellular Tissues	81	1	21	4	10	..	28	..	16	1	8	..	..	..	21	..	3	..	73	..	..	..	1	..	2	..	8	..	..	..	18	..	47	1	23	1	360	8
Skin	32	1	14	2	4	..	15	..	29	..	21	..	37	..	1	..	7	..	3	..	3	..	35	..	7	..	2	..	..	..	7	..	5	..	1	..	223	3

Injuries—General	21	1	..	..	25	1	18	1	..	..	8	2	..	..	3	..	2	..	2	..	11	..	4	..	2	..	2	..	..	..	12	2	8	..	7	..	125	7
Local	105	..	22	..	18	..	57	..	25	1	31	..	..	..	23	..	9	..	87	4	5	..	26	..	24	..	10	..	27	..	53	..	57	..	30	..	609	5
Poisons	1	..	1	..	1	..	..	..	..	..	1	1	..	..	..	..	2	1	..	..	5	..	..	..	..	..	..	..	1	..	1	..	5	..	3	..	21	2
Parasites	39	..	36	..	..	..	..	..	14	..	5	..	..	..	..	..	1	..	30	..	..	..	..	..	71	..	7	..	..	..	2	..	19	..	3	..	227	..
Parturition	117	..	1	..	14	..	..	..	8	..	25	..	..	..	1	..	47	..	25	..	..	..	..	..	1	..	6	..	..	..	..	..	5	..	2	..	252	..
Premature Birth	5	4	..	..	..	..	..	..	1	1	1	1	..	..	..	..	2	..	3	..	..	..	11	..	1	1	1	1	..	..	1	..	3	..	..	..	29	8
Unclassified	285	5	17	..	148	..	35	..	26	1	195	1	..	..	3	..	10	..	105	1	60	1	8	..	..	..	1	..	6	..	11	..	89	..	44	..	1043	9
Lunacy	1	1	2	1	..	..	..	..	..	..	..	..	..	..	3	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7	2
Grand Total	2055	116	304	30	602	61	453	14	374	40	631	25	107	6	233	27	321	36	763	36	203	6	197	4	219	13	233	8	69	..	417	20	800	72	282	12	8263	526
Our-patients	6,797		4,066		2,197		1,370		1,570		2,170		1,845		1,998		3,008		8,382		1,428		1,800		724		3,530		312		9,713		9,603		4,298		64,811	

SUMMARY OF METEOROLOGICAL OBSERVATIONS AT SUVA FOR THE YEAR 1936.

Months.	Mean Pressure in inches. (Reduced to 32° Faht. 45° Lat. and M.S.L.		Air Temperature (F°)											Mean Dew Point. (Degrees)		Mean Vapour Pressure in Millibars.		Mean Relative Humidity (Saturation = 100)		Mean Amount of Cloud. (0–10)	
			Mean Dry Bulb.		Mean Wet Bulb.		Means of		Mean	Absolute Max. and Min.											
							Max.	Min.		Max.	Date.	Min.	Date.								
	8h.	14h.	8h.	14h.	8h.	14h.								8h	14h	8h	14h	8h	14h.	8h	14h
January	29·782	29·737	80·3	83·7	76·3	77·4	86·6	75·6	81·1	92	26	70	7	74·4	74·6	29·2	29·4	83·0	75·2	7·2	7·1
February	29·780	29·735	81·2	86·2	77·2	79·0	87·7	76·3	82·0	91	20	73	9, 10, 15	75·4	75·8	30·0	30·6	82·6	72·0	5·8	5·6
March	29·824	29·771	80·4	85·6	76·8	78·7	88·2	75·2	81·7	94	24	73	8, 22	75·2	75·8	29·8	30·5	84·3	73·3	6·1	6·5
April	29·849	29·786	80·2	85·6	76·2	77·9	87·4	74·6	81·0	93	18	72	13, 14, 17, 23	74·6	74·4	29·2	29·1	82·9	70·3	5·5	6·2
May	29·894	29·834	75·8	79·6	73·1	74·8	81·4	72·4	76·9	89	7	67	29	71·7	72·7	26·6	27·4	87·7	80·0	8·2	8·2
June	30·014	29·956	73·4	78·1	69·2	70·9	79·6	69·4	74·5	86	29	65	26, 27	66·7	66·9	22·7	22·7	80·3	69·2	6·5	6·5
July	30·007	29·946	73·0	77·5	69·3	71·2	79·0	69·9	74·5	86	1	66	6, 7	67·1	67·6	22·9	23·3	82·5	72·6	7·4	6·8
August	29·957	29·898	73·0	77·9	68·7	70·3	79·4	68·3	73·8	85	1	63	6	66·2	66·0	22·1	22·0	79·6	67·2	5·6	5·9
September	30·009	29·944	73·3	77·2	69·2	70·5	78·8	69·1	73·9	86	28	64	6	66·6	66·7	22·6	22·7	80·4	71·0	7·7	7·6
October	29·950	29·885	76·4	79·6	72·8	74·2	81·4	70·6	76·0	89	11	65	2	70·9	71·5	25·9	26·6	83·5	77·1	6·6	7·2
November.....	29·843	29·785	78·8	82·4	73·4	74·7	84·3	72·7	78·5	91	23	67	8	70·8	71·0	25·9	26·0	77·1	68·9	6·1	5·8
December	29·860	29,816	79·5	83·4	73·7	75·1	84·5	73·7	79·1	88	31	67	5	70·8	71·1	25·9	26·2	75·8	67·3	6·4	6·2
Year	29·897	29·841	77·1	81·4	73·0	74·6	83·2	72·3	77·75	..	....	..	....	70·9	71·2	26·1	26·4	81·6	72·0	6·6	6·6
Mean ...	8h. and 14h. 29·869		..	..	..	..	..	..	..	..	....	..	....	..	..	..	..	..	..	..	..

SUMMARY OF METEOROLOGICAL OBSERVATIONS AT SUVA FOR THE YEAR 1936.—*continued.*

Months.	Total Rainfall (Inches.)	Sunshine. (Hours and Tenths.)		Miles of Wind.		Weather. No. of days of							Wind. Number of Observations.															
		Total.	Mean daily	Total.	Mean velocity (m.p.h.	Hail.	Thndr Strms	Gales.	Clear Sky		Overcast		N		N.E.		E.		S.E.		S.		S.W.		W.		N.W.		Calms.	
									8h	14h	8h	14h	8h	14h	8h	14h	8h	14h	8h	14h.	8h	14h	8h	14h	8h	14h	8h	14h	8h	14h
January	9·38	192·6	6·2	5337·6	7·2	0	2	0	0	2	13	15	3	2	7	6	9	9	3	10	1	2	1	1	0	0	2	1	5	0
February	9·14	224·2	7·7	5260·8	7·6	0	4	0	3	4	5	8	4	0	2	3	4	5	3	9	1	7	2	3	3	1	1	1	9	0
March	11·56	205·2	6·6	4392·0	5·9	0	7	0	1	0	7	10	10	3	5	3	1	10	0	8	0	4	0	1	0	1	2	1	13	0
April	7·60	204·2	6·8	4615·2	6·4	0	3	0	4	0	5	7	14	2	7	3	2	9	0	7	0	5	1	2	0	0	2	0	4	2
May	25·63	87·9	2·8	5913·6	7·9	0	2	1	3	0	21	19	5	2	3	6	10	7	3	8	1	3	1	3	0	0	1	0	7	1
June	3·42	160·9	5·4	5904·0	8·1	0	0	0	2	1	9	8	6	0	7	6	9	13	6	9	0	2	0	0	1	0	0	0	1	0
July	3·37	128·3	4·1	6230·4	8·4	0	0	0	2	2	15	16	7	0	3	3	10	14	8	11	0	3	0	0	1	0	0	0	2	0
August	3·03	196·8	6·3	5318·4	7·1	0	1	0	4	3	6	10	13	0	5	2	4	11	3	10	2	5	1	2	0	1	0	0	3	0
September	7·03	123·8	4·1	5404·2	7·5	0	1	0	2	0	17	15	0	0	8	3	8	12	4	8	3	4	0	1	1	0	2	0	4	2
October	27·31	178·0	5·7	5721·0	8·0	0	5	2	1	2	10	11	0	0	6	2	9	11	6	13	2	3	3	1	1	1	0	0	4	0
November.....	10·40	239·2	8·0	5707·2	7·9	0	2	0	1	2	6	5	2	1	4	1	5	8	4	9	0	7	5	3	2	1	3	0	5	0
December	12·06	227·5	7·3	6031·2	8·1	0	1	0	1	2	10	10	0	0	4	0	15	19	6	9	1	3	1	0	2	0	0	0	2	0
Year ...	129·93	2168·6	5·9	65835·6	7·5	0	28	3	24	18	124	134	64	10	61	38	86	128	46	111	11	48	15	17	11	5	13	3	59	5
Mean ..	...	...	...	....	...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

EXTREMES FOR THE YEAR.

Highest Pressure—30·102″ on June 1st at 8 a.m.
Lowest Pressure—29·574″ on January 19th, and April 10th at 2 p.m.
Highest Temperature in Shade—94° on March 24th.
Lowest Temperature in shade—63° on August 6th.
Greatest range—20° on April 18th and October 11th.
Least range—2° on May 2nd, July 14th, and September 29th.
Most rain in 24 hours—9·15″ on October 9th.
Maximum wind velocity—51 m.p.h. from S.S.W. on October 1st at 9.06 p.m.